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ANNUAL REPORT

TO THE

CITY OF BIRMINGHAM EDUCATION COMMITTEE

OF THE

SCHOOL MEDICAL OFFICER

GEORGE A. AUDEN, M.A., M.D. (Cantab.), Ph.D. (Birm.),
F.R.C.P. (Lond.), D.P.H. (Camb.).

INCLUDING THE REPORT ON THE
SPECIAL SCHOOLS,

BY

CHARLES L. C. BURNS, M.R.C.S., L.R.C.P., D.P.M.,

FOR THE

Year Ended 31st December, 1936.

In accordance with circulars 576 *and* 596
of the Board of Education.

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Templar Printing Works, 168, Edmund Street

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*T. H. Hobbes,, M.B., B.S., M.R.C.S., L.R.C.P. Tonsil and Adenoid Clinic (*Appointed* 4/5/36).

*Part time Officers.

ANNUAL REPORT
of the

SCHOOL MEDICAL OFFICER

George A. Auden, M.A., M.D. (Cantab.,) Ph.D. (Birm.), F.R.C.P. (Lond.), D.P.H. (Camb).

For the Year ended 31st December, 1936.

ELEMENTARY, SECONDARY AND NURSERY SCHOOLS.

The work of the Medical Department during the past year has continued without any changes of importance, and with little difference in the figures which result from an analysis of the amount of work carried out. Numerical enumeration of this kind however, gives very little material for a proper evaluation of the work actually carried out for the welfare of the child population of the City, and can take no cognisance of the time and effort given in the attempt to place the ailing child on a higher plane of health.

There have been few changes in the personnel of the staff during the year. Dr. E. E. Benson replaced Dr. D. M. James on her receiving an appointment elsewhere. Dr. Hobbes was appointed as an additional anaesthetist for the Tonsil and Adenoid Clinic. The Dental Staff was increased by the appointment of Mr. H. Linn, L.D.S., and Miss M. Beaumont was appointed to take charge of the John Bright Street Remedial Exercise Clinic on the resignation of Miss B. E. Townley. In December Nurse Gaskarth, who had been in the service of the Education Committee since medical inspection was established in September, 1908, resigned on account of ill-health.

The number of children on the registers of elementary schools in December was 134,287, a figure which is 4,633 less than the corresponding number in 1934. The School Attendance Department mid-year census shewed that the total number of children between the school ages of five and fourteen in July was 143,188, whilst those under five years were 71,352.

The routine inspections of the three age groups specified by the Board of Education regulations resulted in the inspection of 39,109 children. To this number must be added the 6,985 pupils of Secondary Schools—making a total of 46,094 routine inspections. But in addition to this large figure there were 3,360 special inspections and by coincidence 3,360 re-inspections of children in Elementary Schools, together with 131 special and 800 re-inspections in Secondary Schools. But these figures reveal only a portion of the work performed by the Assistant School Medical Officers, for to them must be added 37,120 special inspections and 58,987 re-inspections which took place in the clinics. For the elementary Schools alone the grand total of 141,936 examinations during the year is reached.

On the dental side 112,071 inspections were made (elementary schools 104, 372, secondary schools 7,699), and 37,444 children received treatment (1,744 from secondary schools).

In my Report for 1935 I dealt at considerable length with the question whether the value of the present scheme of medical inspection is commensurate with the amount of time and the financial expenditure involved. There is no need, therefore, to enter into the question again. The increasing part which is paid by the clinics in the general scheme of health supervision of the school population, combined with the redistribution of the population of the City renders an increase in the number of clinics essential. The establishment of four new clinics to serve some of the new housing areas has been for some time under consideration by the Committee, and it is therefore to be hoped that it will be possible at an early date to meet this ever-growing necessity. The urgency of this provision is further shewn by the increasing difficulty of the present medical staff to cope with the additional calls upon the time at their disposal, by special examinations for nutritional surveys, examinations of children recommended for, or in receipt of, free meals; newspaper delivery, and so on, in addition to the routine and special examinations in elementary and secondary schools. There are, however, three factors which are likely in future to exercise profound influence upon the School Medical Service as at present organised. The first of these is the growth of Hospital Contributory Schemes whereby contributors can obtain Hospital treatment when required. The second is the increasing development of the Public Medical Service systems whereby a familial contractual medical service is given by general practitioners, organised and entirely controlled by the Profession itself. The third factor is the projected lowering of the age of eligibility for medical benefit under the National Health Insurance Act.

In Birmingham already the number of subscribers to the Public Medical Service is over 40,000, and of medical practitioners more than 260. It is clear that an organisation of this kind is of the highest possible value in that it strengthens the association between the general practitioner and the family unit. Such an association must be the basis of any efforts towards the progressive improvement of the health of the community as a whole.

The Children's Country Holiday Society has again given much practical help in sending children away for convalescence or for a country holiday. A total of 1,941 children were dealt with, of whom 521 were sent to the Hadley Home, Conway, for three weeks convalescence—these being recommended by the School Medical Department. The remaining 1,420 received a fortnight's holiday in the country. No form of work can be of higher value to the children of the City than this.

The main features of the treatment accomplished by the School Medical Service may be gauged from the following summary:—

Tonsil and Adenoid Operations	1,182
Minor Ailments Treated	22,077
Children treated for Dental Defects	37,444
Mastoid Operations at Selly Oak Hospital	7
" Short Stay " Operations at Selly Oak Hospital	12
Children treated by Ionization (for Otorrhoea)	415
Diastolization	114
Refractions for Eye Defects	3,711
X-Ray Treatment for Ringworm	29
Ultra Violet Ray Treatment	2,313
Examinations under **Bye-Laws for Employment of Children**	2,849
Examinations for Theatrical Licences	56
Examinations for Intending Teachers	81
Examinations of Boarded-out Children	678

In presenting this, the 29th Annual Report of the School Medical Service and after an association with public elementary education for more than 36 years, I may be allowed to close on a retrospective note.

It can be said with truth that during this period the revolution in both policy and practice in public education has been more complete than in any other department of social service. At the beginning of the century it was only dimly realised that, if a sound and healthy nation is to be maintained, the centre of gravity of effort must be based upon the child, for it is in childhood that the seeds are sown from which is reaped the great harvest of physical inefficiency in after-years. In a very large number of elementary schools there was a complete failure to apply the accumulating knowledge of preventive medicine. Lack of ventilation, insufficiency of lighting, over-crowded class-rooms and foetid sanitary accommodation were very common, while verminous conditions, ringworm and similar infections were widespread but remained undiscovered and in consequence untreated.

What was needed was a single unifying system of educational administration. This was supplied by the Education Act, 1902, which in part by easing the financial burden of the maintenance of buildings in non-provided schools and the removal of structural defects, paved the way for the establishment of a *national* scheme of medical oversight of the elementary school population, which by natural sequence was subsequently extended to the secondary schools.

The concept that no scheme of education, if it is to be truly efficient, can be divorced from the consideration of health and physical fitness, soon bore fruit in educational practice. The lessons learnt from the success of the open-air school have been applied to the planning of the elementary schools. The extension and development of physical exercises and the provision of playing fields, camp schools, etc., are all evidences of the changes which have come about from the association of preventive medicine with education.

Perhaps among the benefits which have resulted from the creation of a school medical service none has been more notable than the initiation of orthopaedic schemes which have brought about a most striking reduction in the number of physically handicapped children. With the exception of a very small number of local authorities, of which Birmingham was one, few had realised their obligation towards the crippled, the epileptic and the mentally-inefficient children, and the adoptive Elementary Education (Defective and Epileptic Children) Act, 1899 did little to awake them to a recognition of their responsibilities. It was only when the problem presented by this large group of handicapped children was revealed by the statutory imposition of medical inspection that that of the crippled children was attacked on a national basis by a combination of remedial and educational agencies. It would appear that future progress is likely to be in the direction of a closer co-operation on the part of all agencies working for the well-being of the child—a consolidation of the position already won rather than the conquest of new ground.

NUTRITION.

In accordance with the expressed wishes of the Board of Education a record of the conditions of the children found by the Assistant School Medical Officers at the routine medical inspections has been kept. In an estimation of this kind, which can only be based on the general comparison of each individual child with a mental picture formed by each observer from his experience of what constitutes "normality" in nutrition, it is clear that the personal factor of each of the Assistant School Medical Officers is reflected in the returns.

39,109 children in the routine age groups were examined during the year with the following results :—

A.	Excellent nutrition	3.2%
B.	Normal nutrition	81.0%
C.	Slightly sub-normal	12.6%
D.	Bad nutrition...	3.2%

This is the net result if all the returns of the Assistant School Medical Officers are pooled. Of the total number of children placed in the (D) group one half were reported by one Assistant School Medical Officer. It is clear that this figure is based upon different standards from those taken by the rest of the medical staff. If these figures are excluded from this group the total results are closely comparable to those obtained in 1935.

		1935.	1936.
A.	Excellent	3.11%	3.72%
B.	Normal	87.02%	85.4%
C.	Slightly sub-normal	8.63%	9.04%
D.	Bad	1.24%	1.84%

Apart, however, from this general survey, a "Nutritional Survey" has been carried out by two Assistant School Medical Officers. 21,367 children were examined, with the sole object of determining their state of nutrition. In order to eliminate the personal equation, a number of children were examined by both Assistant School Medical Officers, consecutively and independently, and the results were then compared. A number of other children were then examined in the same way by myself, and each of these Assistant School Medical Officers. By this means it is hoped that a uniformity of judgment has been secured. The results were :—

Excellent nutrition	4.6%
Normal nutrition ...	90.35%
Slightly sub-normal	4.4%
Bad nutrition	.65%

The discrepancies which shew themselves in the result of the two surveys may be explained by the circumstances under which each survey was made. In the routine inspections the object is a general estimate of the physical state and development of each child in the routine age groups. The nutritional survey was on the other hand an *ad hoc* examination, with the sole object of determining the degree of nutrition.

The problem of nutrition which is so much before the public at the present time is no new one but one which has engaged the watchful attention of those connected with the School Medical Service since its beginnings, and a reference to earlier reports will show how much has been accomplished, and may reveal some of the complexities of its elucidation. In my Report for 1908 I attempted to state the problem as follows—

> "The prime object of what may be termed the statistical aspect of the work of inspection is to obtain data upon which to base an estimate of the present physique of the nation. This is a more complex problem than is apparent at first sight, for not only does the estimation of the degree of nutrition by ocular inspection alone without physical measurements import so large an element of the personal equation of the observer that stated results are valueless for comparative purposes. At the same time the tabulated heights and weights of children cannot of themselves be regarded as accurate expressions of the physique and development of the child

community. Too much importance must not be attached to the degree of conformity of an individual child to a standard of proportion and symmetry based upon averages as a gauge of its growth and development . . . . Physique, whether individual or national may be defined in general terms as the outcome of heredity tempered by environment.''

In that and subsequent reports I attempted to use as a gauge of the environmental stress two factors, *i.e.*, (a) the Infant Mortality Rate for the ward in which the schools were situate, and (b) the percentage of parents who attended the examination of their children who were unemployed or partially employed.

> ''It should be possible to ascertain whether the children born in a certain Ward during a high Infant Mortality year shew a physique inferior to those born in the same Ward when the Infant Mortality is low. The problem may be expressed thus 'Is the struggle for life in the first twelve months selective in the sense that the weaker infants are destroyed while the stronger infants survive, or do the conditions of life which lead to a high Infant Mortality Rate produce a general lowering of the vitality and capabilities of those children who survive to school life, and leave them marked and seared by the fire through which they have passed'? (Report 1909, p. 15). There follows a table which is here re-introduced :—

Ward.	*Persons per acre.*	*Infant Mortality Figure.**	*Children examined*	*Normal*	*Below normal.*
Edgbaston	9.7	—47.2	455	85%	14.8%
Rotton Park	41.1	—22.0	629	84%	16.0%
All Saints'	81.9	—16.2	661	78.5%	21.5%
Duddeston	74.2	*16.0	852	77.2%	22.8%

*The " Infant Mortality Figure " is the mean level of the Ward infant mortality rate above or below that of the City as a whole for the previous five years.

Experience has proved that improvement in the physical development of the children at school age depends upon an improvement in all those social factors to the malign influence of which the infant mortality is a delicate index and gauge.

There may be said to be three distinct classes of malnutrition. To the first of these belong the children described above whose physical development shews a continuance of those causes and conditions which in infancy produce the infant mortality rate, who would probably have succumbed without the aid of the Infant Welfare Centres, Hospitals and all those agencies which have done so much to diminish the risks of infant life. The children who have suffered from rickets, gastro-enteritis, whose digestive systems remain weakly from conditions leading to Infantilism, Cœliac disease and similar complaints, bear permanent evidence of their early struggles to maintain their existence.

Next there are the children who have suffered from some form of serious illness, from which convalescence is incomplete, or who live on a lower plane of health than their more hardy companions, falling victims to one form of illness after another with little spare vitality or energy.

The last group comprises those who do actually suffer from insufficient or unsatisfactory food. It is clear that no common measure of nutrition can be applied to these three groups. In the words of Professor Sharman*: "In the findings of recent investigations the judgment of excellence in bodily welfare rests not in gains in height alone, or gains in weight alone, or both of these together, but upon a comprehensive view which embraces both these along with the somewhat less tangible but none the less real gains in alertness, in general tone, in brightness of eye, and in a wholesomeness of skin corresponding to the sleekness of a well-conditioned animal."

The consonant results from these surveys over two years do, however, shew that in Birmingham there is no high incidence of malnutrition in the child population. It may well be that the nutrition of many children might be improved, but this would appear to depend upon a generally increased knowledge of food values and of making the best use of them, together with a better appreciation of the most economical way of expending the family budget thereon.

For the second group the provision of open-air curricula, of opportunities for convalescence after debilitating illness, of ultra-violet-radiation and of supervised physical exercises, are likely to play an increasing part in the promotion of a higher standard of nutrition. It is in fact, to the general betterment of social conditions and the amenities of life which has marked the last thirty years that we can attribute the great improvement already shewn, an improvement which warrants confidence for the future.

MILK IN SCHOOLS SCHEME.

This scheme under the Milk Marketing Board came into operation in October, 1934, and the figures given in the accompanying table therefore represent the results at the end of the second year of the Scheme, *i.e.*, on 1st October last

MILK IN SCHOOLS SCHEME (1st October, 1936).

Type of School.	*No. of Children on Register on 1st October, 1936.*	*No. of Children receiving milk under the Scheme of the Milk Marketing Board.*			*No. of Children receiving milk under other arrangements.*		
		Free	*For Payment.*	*Total*	*Free*	*For Payment.*	*Total*
Elementary	132,086	135	44,503	44,638	301	2,891	3,192
Special	2,309	†430	719	1,149	4	164	168
Nursery	139	—	139	139	—	—	—
Secondary and other schools for Higher Education	6,309	—	1,694	1,694	—	—	—
Total	140,843	565	47,055	47,620	305	3,055	3,360

†The majority of these children are at the Residential and Open Air Schools. They receive milk at the expense of the Education Committee.

**Food and Health,* p. 199.

Thus it will be seen that one-third of the children on the role of the elementary schools took advantage of the Scheme, 33.8%. At the end of the first year (1st October, 1935) the percentage was slightly higher, 36.8. The reasons given for this seeming-apathy and disregard of the opportunity to take advantage of the Scheme are in themselves trivial, but in combination produce a regrettable reduction of those who receive the milk. During the Summer a number of schools were visited and classes of both boys and girls were questioned in order to obtain some idea of these reasons and to attempt to create greater enthusiasm amongst them. Some children stated that they did not like the taste of milk, others that they did not like cold milk. Some of the elder boys said that to take milk, which is a baby's food, was beneath their dignity. There were a comparatively small number of cases where relative poverty was stated to be the cause and very often in these cases the younger children were receiving milk. Almost without exception the children who gave the reason that they did not like cold milk, at once said that they had no objection to ices. In fact in many cases during the summer the money provided by the parents for milk was expended instead on an ice. The suggestion which has been put forward that some flavour might be added to the milk in order to increase its attractiveness, is not one which is likely to prove satisfactory. Apart from the fact that one, though perhaps not direct, object in the milk distribution scheme is to encourage the habit of milk drinking amongst the whole community, it remains to be seen whether titillation of the palate by some exotic flavour such as vanilla or peppermint, will not quickly cloy and cease to attract. Children will as readily become accustomed to the taste of milk as to any other flavour, and no adventitious aid of this kind is likely to increase the popularity of milk as a beverage.

A similar problem arose in 1909 when porridge was first added to the free breakfasts then given. For the first few days few children would touch it, but within a few days it became one of the most popular items of the meal.

All milk supplied is pasteurised and the Health Department keeps a careful watch on the milk and the pasteurisation plant. Bacteriological examinations are carried out systematically.

In addition to the Milk Marketing Board Scheme there are a number of Departments which provide milk chiefly from proprietary brands of dried milk, and several thousand children avail themselves of the milk.

SPEECH TRAINING CLASSES.

The accompanying reports of these classes give proof of the importance of the effort to remove "a disability which renders the sufferer therefrom unable to take proper advantage of the school curriculum, and from a very serious obstacle to their progress in after life." (Report of the School Medical Officer, 1910.) "We have sound knowledge when we know the cause" wrote Aristotle, and it is this search for the cause of stammering and kindred defects which gives value to the investigations which are being carried out by the Speech Therapists and Dr. Kemp, who is associated with the scheme in its medical aspect.

The following reports have been submitted:—

Montgomery Street Centre.

Owing to the illness of the Speech Therapist, no classes were held at the Montgomery Street Centre until Easter, 1936. The results have, therefore, not been so satisfactory as in previous years. A few of the children relapsed seriously during that period, but many relapsed slightly, and none can be considered to have improved. When once the classes have lapsed, some time must pass before the routine is renewed and regular attendance secured.

No change has been made in the organisation of the classes, except that a larger number of Secondary School pupils is now being admitted The children range from 6 to 15 years and are drawn from 31 different school Departments on the south side of the City. It is satisfactory that cases are now being referred earlier than formerly, and there has been a large influx of children between the ages of 7 and 9 years. This is important, as the chances of a complete cure are very much greater when the defect is not of very long standing. It is interesting to observe that there is, at present, a larger proportion of girls in attendance than for some time.

Visits to the children's homes and day schools have proved very helpful. Co-operation between the work of the day school and that of the Speech centre is essential, and everywhere one has found enthusiasm and a desire to collaborate in every possible way. An attempt is now being made to provide notes of the lessons given in some "minor" defects, in order that the child's own teacher may be able to help him with his speech practice in the intervals between his visits to the Centre. Owing to the large number awaiting admission and the difficulty of travelling long distances, it is rarely possible for a child to attend more than twice weekly, although in many instances, a short daily lesson would be of more value. It is here that an interested teacher or parent can be of great help.

An investigation is being carried on, not only into the prevalence of left-handedness and of a hereditary tendency in defective speech, but also into the question of "right-brained dominance." The theory is that certain individuals who should naturally be governed by the right side of the brain, may yet never manifest any sign of left-handedness, even in early childhood. Nevertheless, there is interference with the natural function, which may be expressed in stammering, and a careful training in the use of the left hand may result in the complete cure of the speech defect. Extensive experiments have been made by Lee Travis in U.S.A., and he claims a large percentage of cures. Certain children at the Montgomery Street Classes are being carefully studied and experiments have already been tried in using the left hand for writing and drawing. Should these prove successful, more extensive activities will be tried, but, such experiments must be carried out with extreme care. In every case, there is a history of left-handedness in the family, but the child himself has never shewn any sign of being left-handed, so far as teacher and parents are able to remember. This investigation will be continued over a period of time, and no figures are yet available. With regard to the incidence of actual left-handedness and a hereditary tendency, figures are given below :—

	Stammering.	*Other Defects.*	*Total.*
Number of cases investigated	80	29	109
A. Left-handedness only	14	8	21
B. Hereditary or other cases in family ...	23	9	33
C. Both A and B	22	1	23
D. No information available, etc. ...	21	11	32

Montgomery Street.

	Boys.	Girls.	Total.
Number on Register, 1st January, 1936.			
Stammerers	29	4	33
Other defects	10	5	15
	39	9	48

	Boys.	Girls.	Total.
Number admitted during 1936.			
Stammerers	30	5	35
Other defects	3	2	5
	33	7	40

RESULTS OF TREATMENT (in those discharged during 1936).

	Stammerers.	Other Defects.	Total.
Provisionally cured	8	5	13
Much improved	3	1	4
Slightly improved	7	0	7
Failed to continue	3	4	7
	21	10	31

Severn Street Centre.

The attendance this year has been comparatively poor—partly because there has been a great deal of illness among the children and partly because the distance from some of the districts to the centre is considerable, and, in view of the fact that more and more children under the age of 10 are being admitted, this makes attendance in bad weather very difficult. There has been a noticeable increase in the number of stammerers admitted from the Infant Schools. In some cases they made rapid progress—in others one feels that one can but prevent the defect from becoming more serious until such time as the child is old enough to tackle the problem with understanding. The need for speech training for Secondary School children is being more widely recognised and requests for their admission are increasing. The substitution of "f" and "v" for "th" is very prevalent among those attending the centre; indeed it is more in the nature of a feature of the dialect in this district rather than an abnormality. It therefore seems wiser to leave this fault to treatment in normal school speech training to be dealt with under the heading of "accent" than to use clinic time which could be devoted to more urgent difficulties.

A new type of tongue depressor is being used, the object of which is to hold down the back part of the tongue while leaving the tip free to articulate against the gums and front part of the hard palate.

Certain observations have been made of physical symptoms such as tension and spasms which are complementary to the stammer, with a view to ascertaining if there is any relationship between these symptoms and the possible cause of the psychological condition of which they are evidence.

90 cases were observed and it was noticed that in 25 of them there was no accompanying obvious spasm or tension, but that in the remaining 65 there was at least one and sometimes as many as four different movements were adopted simultaneously.

Movements not directly concerned with speech mechanism included stamping of the feet, jerking of the head or body, and twitching of the eyelids. Symptoms related to the organs of phonation and articulation were chiefly spasms of the tongue or jaws and puckering of the lips.

Associated psychological conditions were varied, but the importance of emotional disturbances in home environment is again most marked. Undesirable attitude of parent to child also play a considerable part in the causation of speech defects, for example, over-domination or over-protection, unfair criticism, and sometimes neglect, though the latter is usually unintentional.

Severn Street Centre.

	Boys.	*Girls.*	*Total.*
No. of names on Register, 1st Jan., 1936			
Stammerers	46	10	56
Other Defects	18	6	24
	64	16	80

	Boys.	*Girls.*	*Total.*
No. of children admitted during 1936.			
Stammerers	62*	7	69
Other Defects	10†	7	17
	72	14	86

* 5 Re-admissions.

† 1 Re-admission.

RESULTS OF TREATMENT (on children discharged during 1936).

	Stammerers.	*Other defects.*	*Total.*
Provisionally Cured	22	11	33
Much Improved	17	7	24
Slightly Improved	8	2	10
Failed to continue	4	—	4
	51	20	71

Speech Training Classes at the Children's Hospital.

These classes are carried on with remarkable success under Miss Parsons. The latest figures available shew that there were twenty-two children on the register suffering from speech defects due to cleft palate and hare lip. There have been in addition a number of children suffering from stammer and other speech defects, but as the majority of these are under school age they are not included in the above figure.

TONSILS AND ADENOIDS.

The number of operations performed at the Handsworth Clinic was 1,182. The year was uneventful and there were no cases which caused anxiety. This is a smaller number than in previous years, being 110 less than in 1935. This fall in number cannot be attributed to any diminution of the frequency of enlargement of tonsils and adenoids, or to any tendency to a more conservative attitude concerning the propriety of operative treatment. The cause is to be found in the increased membership of the Hospitals Contributory Association whereby operative treatment can be obtained by any subscriber who requires it. Accordingly, parents of children recommended for treatment prefer to obtain a Hospital voucher in place of the payment of the fee which under the Education Act must be charged for treatment given.

Since the Clinic was opened in October, 1912, the number of operations performed up to the end of December, 1936, has been 31,454.

In my Report for 1933 I drew attention to the importance of nasal discharge as a sign of sinus infection and urged that, its presence should always bring to mind the possibility of this condition; if Tonsils and Adenoids appear to need removal the absence of infection of the antra should first be ascertained before giving a good prognosis as regards the cessation of nasal symptoms following the removal of Tonsils and Adenoids.

Mr. F. B. Gilhespy, Aural Surgeon to the Committee has submitted the accompanying report:—

During the last year only 7 patients have had the benefit of a mastoid operation for their chronic otorrhœa. This reduction in numbers has not been due to lack of patients requiring this operation, but to the fact that owing to the greatly increased demand for bed accommodation at Selly Oak Hospital, beds have not been available. There are many more such patients awaiting operation.

Zinc ionisation is still extensively employed in the treatment of the running ear and in suitable cases is a more rapid form of cure than the routine treatment, whether dry or wet. The younger age at which parents of deaf mutes realise that their children should be sent to the Deaf School is a satisfactory sign that information on this subject is spreading, and also a reflex of the popularity of the deaf schools among intelligent parents.

A recent innovation is that there is also a more close liaison between this Clinic and the Speech defects classes, cases being referred to me from the latter for possible aural defects which might be a factor in causing errors in speech. I am also indebted to these classes for the treatment of cases referred from the Aural clinic.

A number of cases with nasal complaints has also been treated at Selly Oak Hospital and followed up later at the Clinic, and the following remarks include these cases and those treated in previous years and since kept in touch with.

In June, 1936, I read a paper before the Midland Medical Society on "Nasal Discharge in Childhood," some of the clinical material for which I had collected from Gt. Charles Street Clinic. At this Clinic one has enjoyed the advantage of a broad survey of children with nasal complaints as children have been kept under observation for as long as necessary, during their period of school life. Some of the conclusions which I drew in my paper are as follows—

Nasal discharge may be present already when the child reaches school age. It is possible at this age that the maxillary antrum may be infected and requires surgical treatment.

Removal of tonsils and adenoids in young children does not invariably cure a nasal discharge. In cases of marked nasal discharge occurring in a child with enlargement of the tonsils and adenoids the antra should be washed out at the time of the tonsil operation. Some observers doubt whether, in the presence of antral infection, the removal of tonsils and adenoids helps the sinus infection to resolve, but I cannot entirely agree with this view. An inability to realise the possibility of a sinus infection accounts for what appears to be failures of the tonsil and adenoid operation.

Faulty removal—often in the very young child—of tonsils and especially adenoids is a cause of nasal discharge which, when present, is hard to clear up.

The condition may be infective and its presence, in several members of a family may be seen at a Clinic.

A number of X-rays and a follow-up of the older children, after school age, have shown that nasal discharge which did not clear up under the treatment already mentioned was due to ethmoiditis, a condition which, in my view, may have a much earlier origin in life than previously considered possible.

A certain number of children, despite thorough surgical and ancillary treatment do not entirely clear up. This has been noted by observers in other countries and it is probably due to some unknown systemic factor.

In previous years I have referred to the marked relationship between nasal and ear conditions, and undoubtedly the provision of treatment for the former has helped to deal more successfully with the latter.

It will be a great loss if children with nasal and aural complaints are to be deprived of systematic treatment and following up.

DIPHTHERIA IMMUNISATION.

There is good evidence of the increasing recognition on the part of parents that by the simple process of immunisation they can protect their children against that disease which has been one of the chief menaces to child life. As the danger is greatest from about three to eight years, every effort is made to induce parents to secure this protection before the child's entry into school, where the aggregation of large numbers of children inevitably increases the risk of any form of infection. During the year the Medical Officers of the Health Department have added to the number of children thus protected an additional 14,697 children, viz :—

Elementary and Special Schools...	7,500
Infant Welfare Centres	6,332
Council House Clinics	536
Institutions	329
	14,697

As was mentioned in the Report for 1935 the prevalent type of diphtheria in many of the large centres of England is a serious one. This gravity of type is reflected in the number of deaths, all of which have occurred in non-immunised cases. The total number of children in the City who have been thus protected now reaches the figure of about 86,000, but it must be remembered that the age of greatest susceptibility is under six years. and that in each succeeding year of age there is a diminishing risk. If therefore this death-dealing infection is to be successfully conquered, it is in the pre-school and infant school that the combat must be chiefly fought.

Of all these 86,000 children who have received the full course of injections up to the end of 1936 (258,000 injections) only fifty have developed diphtheria—most of them very mild cases—and not one has died from the disease. During this period there have been over 11,000 cases and 722 deaths among children who have not been thus protected.

There is no special selection of children for innoculation—it is entirely dependent on the parents. The work is carried out all over the city and so far as risks of infection are concerned, these are the same for protected and unprotected children. Any advantage from a statistical point of view lies with the unprotected group for that group includes children who have already had diphtheria and young babies who are naturally-immune for the first few months of life.

By the end of 1934 approximately one quarter of the children under fifteen years of age had been innoculated. If innoculation were of little or no use it would be expected on a statistical basis that the two groups would suffer from diphtheria in much the same proportion. In actual fact there were nine cases of diphtheria and no deaths in the protected quarter, and 853 cases and 79 deaths in the unprotected three-quarters of the children at risk. In 1935 on the same basis with 16 cases and no deaths in the protected group and about 38 cases and no deaths in the unprotected group would be expected, actually there were 964 cases and 80 deaths. In 1936 there were 974 cases and 62 deaths in the unprotected group, while there were 12 cases and no deaths in the protected group, which comprised approximately one third of the total child population under 15 years of age.

Thus, in Birmingham, in unselected children who have been exposed to diphtheria, which (in the last three years) has been very frequently of a virulent type, there has been more than 99% complete protection from the disease and 100% protection from death.

In spite of these facts nearly 3,000 children die every year in England and Wales from lack of this protection. Nearly 30,000 children have died from diphtheria in England and Wales in the last ten years, which is the greatest single cause of death in children from five to ten years of age, whereas during the same period some 14,000 children were killed in road accidents.

In the face of these facts, to attempt to persuade parents to abstain from seeking this protection, so easily and painlessly secured, is as retrograde as it is heartless.

Looking at the question from a financial standpoint, the cost of treatment of a case in hospital averages not less than £25, that of complete immunisation of a child 3/10d.

ULTRA-VIOLET LIGHT TREATMENT.

The appointment of an additional nurse has allowed more use to be made of the mercury vapour lamps. This is reflected in the increased number of children who have been thus treated as is shewn in the accompanying table.

	Number Treated	*Cured or much Improved*	*Improved*	*No Better*	*Ceased attending*
Debility	1,193	516	579	60	38
Rheumatism ...	135	61	62	9	3
Chorea	38	8	24	6	—
Bronchitis and Asthma	498	221	249	19	9
Nasal Catarrh, etc. ...	66	30	33	3	—
Enlarged Glands ...	57	32	23	2	—
Otorrhoea and Deafness	28	10	18	—	—
Blepharitis and Conjunctivitis ...	34	17	11	4	2
Vomiting	21	11	9	1	—
Chilblains	31	24	6	1	—
Alopecia	45	32	13	—	—
Impetigo	101	99	2	—	—
Other Skin Trouble	66	34	28	2	2
Total	2,313	1,095	1,057	107	54

In considering these headings it must be remembered that almost every defect thus enumerated is not primary but symptomatic of a more general condition of failure from full health, and that it is to the improvement of this general condition that the treatment is directed. This table does not include the large number of cases in which this treatment is given by the Remedial Gymnast and masseuses as a part of the treatment provided in the Remedial Exercises Clinics.

RINGWORM.

The incidence of this fungus-infection, formerly one of the chief causes of prolonged absence from school, has shewn a still greater reduction and it appears to be within the prospect of extinction. Only 30 cases were discovered which were considered by Dr. Russell Green, Radiologist to the Committee, to require X-ray treatment. In addition to these, there were 40 cases submitted to him in which other treatment was all that was required. The Clinic continues to treat with X-rays cases on behalf of other local education authorities. Nine such cases were treated during the year.

SCABIES.

On the other hand, the incidence of this parasitic infection has remained stationary. 554 cases were treated at the clinics, and 47 elsewhere. The opening of the Baths-Centre at Bacchus Road by the Health Department now gives an opportunity for other infected members of the family to obtain treatment, and thus to reduce the possibility of re-infection of the school children.

ACUTE RHEUMATISM.

The names and addresses of all children who have been admitted to the Municipal Hospital for acute rheumatism are reported on their discharge. It is therefore possible to keep them under some sort of supervision in school or at the clinics. During the year 204 children were thus reported to the Medical Department. The same scheme applies to the children discharged from Baskerville.

The institution maintained by the Birmingham Society for the Care of Invalid Children at Haseley Hall has now completed six years' work. (39 beds.) Of the 207 children treated during these years, the Honorary Secretary, Mr. Frank Mathews, reports that 138 have completed the cure and of these 120 are said to be doing well. Seven returned to Haseley Hall following a relapse and are now reported as doing well, four relapsed and have been treated elsewhere. Six have not proved satisfactory. In addition a number of children have been boarded-out in the country or in Cottage Hospitals with very good results.

Much mystery still surrounds the problem of acute rheumatism. Its precise relation to the *streptococcus haemolyticus* organism, which is associated with tonsillitis and with scarlet fever, is clear, but there are many questions which still await solution. There appears to be definite evidence that poverty, over-crowding, deficient ventilation and dampness play their part and a recent research carried out under the auspices of the Medical Research Council seems to point to the possibility of some failure in the retention of Vitamin C (Ascorbic acid) in the body as being correlated with the clinical picture labelled "acute rheumatism."

COTTAGE HOMES AND BOARDED-OUT CHILDREN.

At both the Erdington and Shenley Fields Cottage Homes the health of the children has been very satisfactory, apart from the usual outbreaks of infectious diseases which are inevitable in any community of this type.

At the end of the year the total number of children boarded-out in families was 536, of whom 142 are living in the country, mainly in the neighbourhood of Bewdley. During the year these children, with the exception of a small number boarded-out at some distance, have been examined by me, in many cases twice.

CAMP SCHOOLS.

Over two thousand five hundred children enjoyed the advantages of a period in the country with manifest benefit to their health.

	Bell Heath. Boys.	*Blackwell. Girls.*	*Stansfeld. Boys.*
No. of children sent	962	1,034	516
No. of schools sending	29	32	13
No. of weeks the Camp School was open	40	40	41

TRANSFERENCE OF JUVENILES FROM DEPRESSED AREAS

Since the introduction of the Juvenile Transference Scheme in January, 1935 the total number of boys and girls brought to Birmingham under the scheme is

Boys—743 : Girls—64 : Total—807.

All these undergo a medical examination before selection, and their general health has been exceedingly good. Cases of minor injuries, or complaints of being unwell, are usually seen by me at the Education Office. A few cases of toothache have been treated at Great Charles Street Clinic.

It is reported that only in one instance has there been a prolonged absence from work, that of a boy from South Shields who developed a tuberculous ankle in April last and is still receiving treatment as an in-patient at one of the Birmingham Hospitals. Two boys were operated on for appendicitis, and two suffered from pneumonia, and following their discharge from Hospital were sent to the country for convalescence.

The conversion of Arden Road Boys' School into a Reception Hostel for thirty boys (opened in October) has proved a very valuable adjunct to this work, more especially in that it allows a period of observation of a boy's dependability and general character before placing him into lodgings.

REMAND HOMES.

The question of the Juvenile Offender is one upon which there is a considerable diversity of opinion. Some would see in the increased numbers of children who appear before the Juvenile Courts a reflection of an increasing amount of delinquincy. To others this increase appears to betoken a change of attitude on the part of the community towards the problem of wayward youth in conflict with the social conditions in which he lives.

During the year I examined 138 boys at the Remand Home either on committal to an approved school, or on remand for a special examination. The age classification of these boys is interesting :—

Age	*Number.*	*Age*	*Number.*	*Age.*	*Number.*
11	3	14	16	16	52
12	11	15	31	17	1
13	24				

As in previous years the percentage of boys, in whose case there was clear and definite evidence of unsatisfactory home conditions throws into high relief the malign influence which those factors which cause a disturbance in family relationship exercise upon the growing youth of our cities. Thus among the 138 cases eight were orphans; thirty four had lost their father, nine their mother. There were eleven step-parents. Three (one included in the former figure) were illegitimate. In six instances one of the parents had deserted and in twelve of the homes the father or mother was invalided; in three of these the mother was in a Mental Hospital. Thus 57.6% of the total shew those unfavourable home conditions which are likely to produce psychological reactions which experience has shewn find expression in unsatisfactory behaviour. This summary does not include those cases where the pinch of poverty has weighed down the scales still further against the youth.

In addition to the above, I examined 64 younger children remanded in the Summer Hill Receiving Homes and 53 children who had been committed to the care of the local authority as in need of care and protection.

MEDICAL EXAMINATION OF CHILDREN REGISTERED FOR EMPLOYMENT IN THE DELIVERY OF NEWSPAPERS OR MILK.

Section 6 (a) of the Bye-Laws governing the employment of children in the delivery of Newspapers or Milk provides that :—

> "No child shall be so employed unless within 14 days from the date when the employment begins the child has obtained from a School Medical Officer a certificate that such employment will not be prejudicial to his health or physical development, and will not render him unfit to obtain the proper benefit from his education, and a certificate has been produced to and endorsed by his employer.
>
> No charge shall be made for such certificate."

The number of children over 12 years of age who have been examined under this Bye-Law continues to increase, as can be seen by the figures for successive years :—

Year ended 31st December, 1933	=	1915
Year ended 31st December, 1934	=	2417
Year ended 31st December, 1935	=	2748
Year ended 31st December, 1936	=	2849

TUBERCULOSIS.

Dr. Dixon, Chief Tuberculosis Officer reports :—

"During the year 1936, the number of children dealt with at Yardley Green Road Sanatorium was 192. Of these 106 were males 86 were females.

Out of the 192 there were 107 who were admitted primarily for observation, 75 of which were discharged with no definite signs of Tuberculosis, and 32 remained for treatment.

Of the 117 who received treatment, *60 were in Group I, 16 in Group II, 4 were in Group III, and 37 were in Group IV, i.e., were non-pulmonary cases. The non-pulmonary cases consisted of tuberculosis of the bones and joints, abdominal tuberculosis, peripheral glands, etc., and the majority of these children were treated in the artificial light clinic with excellent results."

***Classification of Groups.**

Group I.—Cases with slight constitutional disturbance, if any ; e.g., there should not be marked acceleration of pulse nor elevation of temperature, except of very transient duration ; gastro-intestinal disturbance or emaciation, if present, should not be excessive.

The obvious physical signs should be of very limited extent as follows :—either present in one lobe only, and, in the case of an apical lesion of one upper lobe, not extending below the second rib in front or not exceeding an equivalent area in any one lobe ; or where these physical signs are present in more than one lobe, they should be limited to the apices of the upper lobes, and should not extend below the clavicle and the spine of the scapula. No complication (tuberculous or other) of prognostic gravity should be present. A small area of dry pleurisy should not exclude a case from this Group.

Group III.—Cases with profound systemic disturbance or constitutional deterioration, with marked impairment of function, either local or general, and with little or no prospect of recovery. All cases with grave complications, (e.g., diabetes, tuberculosis of intestine, etc.), whether those complications are tuberculous or not, should be classified in this Group.

Group II.—All cases which cannot be placed in Groups I and III.

Group IV.—Patients suffering from non-pulmonary tuberculosis include :—

(1) Tuberculosis of bones and joints.
(2) Abdominal tuberculosis (i.e., tuberculosis of peritoneum, intestines or mesenteric glands).
(3) Tuberculosis of other organs.
(4) Tuberculosis of peripheral glands.

The names of all children who are found to present signs of active tuberculosis are reported to the Medical Department, as also are the names of all children on discharge from the Sanatorium. These are then kept under continued observation at the clinics or if unable to attend school, are entered on a special register.

TUBERCULOSIS (All Forms).
Notifications, 1936.

Ages.	*Respiratory System.*		*Nervous System.*		*Intestines and Peritoneum.*		*Other Forms.*	
	Cases notified.	*Deaths.*	*Cases notified.*	*Deaths.*	*Cases notified.*	*Deaths.*	*Cases notified.*	*Deaths.*
0	7	6	3	2	1	1	2	3
1	4	3	5	5	—	—	4	1
2—4	25	5	3	3	2	1	12	3
5—14	42	4	6	9	7	—	36	9
Totals	78	18	17	19	10	2	54	16

CHILD GUIDANCE CLINIC.

Dr. C. L. Burns has made the following report :—

"At the end of five years' work it is possible to estimate roughly the number of cases which may be expected at the Child Guidance Clinic in proportion to the total school population. These were drawn at first from about one quarter of the City and represented a school population of about 36,000, but more and more cases have filtered in from other parts and are now probably coming from about half the schools in addition to other sources. They are referred at an average rate of 170 yearly, and an interesting point is that this figure has remained fairly constant for each of the five years. Of these, some will come for consultation and advisory treatment only, others will prove unsuitable, or unco-operative, so that the numbers taken on for treatment dwindle to less than two-thirds of the number referred.

With the present allotment of four sessions to the medical director, three to the psychologist, one full time social worker and some voluntary assistance, the maximum number that can be taken on for treatment is probably about 100 annually. This, however, is a relative figure, for it is obvious that the fewer cases, the more complete, intensive, and presumably more successful the treatment. It is thus always a question of balance between quantity and quality.

There is also the question of accommodation. Till the present time the clinic has been housed in a section of a school clinic, without a waiting room for parents. This has entailed much overcrowding. A house has now been obtained, situated at 45, Lee Crescent—a quiet little backwater, just off Lee Bank Road, which is on the 'bus route between Bristol Street and Five Ways. This will give ample accommodation; each member of the staff will have his or her own room, and there will be two play-rooms, as well as a scullery for water-play, and a small yard and garden. With all this breathing-space, amid much pleasanter surroundings, we shall expand and flourish anew.

The greater number of cases are referred for behaviour problems, although the neurotic children, i.e., those suffering from fears, obsessions, night-terrors, undue shyness or unsociability, are in some ways the more important, as they have the making of future neurotics and psychotics.

There is a large group of children who are considered to be "nervous" in various ways, and they are of interest to the school medical officer because the symptoms arise from a combination of physical and psychological causes, and very often they can be effectively cured by simple means such as advice on diet and general hygiene, or by removal to an open-air school. (The genesis of this type of neurosis is referred to in the Special Schools supplement of the report.) Over-anxiety on the part of parents is found to be one of the major causes in the production of nervous children, and by improvement of the child the vicious circle of bad suggestion and ill-health is to some extent broken.

There remain certain children who appear to be more innately neurotic, or in whom the nervous condition does not seem to depend on physical condition so much as on their whole psychological environment acting upon a personality already predisposed to neurosis: these are the cases for which Child Guidance treatment is indicated.

The same possibility of selection comes in in the case of behaviour disorders, for many of them should be curable by simple common-sense advice to the parents, and by wise handling at school. The effect of physical conditions such as sinus infection should not be forgotten.

Other children, however, exhibit such abnormal behaviour that something more radical is obviously involved. Anti-social traits, aggression, cruelty, or delinquency have become a part of their personality, and may arise from frustration and deprivation in early childhood, so that their adjustment demands prolonged and special treatment.

By recognising more clearly, as time goes on, the type of neurosis and problems of behaviour which can yield to forms of treatment or environment at the disposal of assistant school medical officers, teachers and parents, it will be possible to consider a Child Guidance Clinic not so much as an isolated unit for a special class of children, as one link in the chain of services which minister to the body and mind of the school child. The principles of child health and child psychology should operate everywhere: from the home, welfare-centre and nursery school, right through to secondary school or apprenticeship to trade. These principles should not be applied in water-tight compartments, for mind and body form an indivisible whole. There are many degrees in deviation from the normal which require various types of treatment, and one of them is Child Guidance."

DENTAL TREATMENT.

The percentage of children who attended the clinics after being found on inspection in the elementary schools to need treatment, has again shewn a slight rise, i.e., 51.7 per cent. In the previous two years the percentage was 48.0 and 50.7. In addition to these is a considerable number of children who, as a result of inspection, receive treatment elsewhere. How many such it is not possible to estimate, but the City provides unusually favourable opportunities for dental treatment both in the number of dental surgeons in practice, in the dental departments of several hospitals, and especially in the existence of a Dental Hospital and Dental School as part of the University. Moreover, the dental scheme is open to the whole of the school population without restrictions as to age or the type of treatment required, i.e., extractions or fillings. This absence of restrictions has an influence upon the statistical aspects of the work of the school dental service.

As regards the character of the work done in the clinics, I have pointed out in previous reports how misleading is the attempt to form a judgment from a comparison of the number of permanent teeth extracted for every hundred children treated. If it is assumed that 60 per cent. of the children receive treatment as the result of inspection, it is highly probable that many of the 40 per cent. who neglect to do so will in course of time be driven by toothache or abscess to apply for treatment. This of necessity will mean extraction—a form of treatment which is the negation of any scheme for the conservation of the teeth. Hence the larger the number whose inspection is followed by treatment, the smaller will be the number of extractions for permanent teeth for other reasons than for orthodontic treatment. These form quite an appreciable number of extractions and in future reports it will be possible to give the actual figures, but by calculating from the number for the last three months of the year, it may be stated that between 1,900 and 2,000 teeth were removed for orthodontic reasons. A recognition of the importance of dental treatment is of slow growth and much prejudice and ignorance has still to be overcome. Moreover, if treatment has been neglected, it is generally necessary to perform multiple extractions which add very materially to the list of permanent teeth removed. Another factor which upsets the ratio between extractions and fillings of permanent teeth is the frequency with which parents, having kept the appointment for extractions (which must be performed first in order to reduce the sepsis in the mouth) fail to keep the re-appointments made for filling the other teeth. There is still a widespread prejudice against fillings which does not exist against extractions, and a belief that as long as there is no pain, nothing need be done.

But for those parents who have regard to the preservation of the teeth of their children two conditions are essential. Firstly, the teeth must be inspected at sufficiently frequent intervals to allow the detection of points of caries in their early stages, in order to maintain the mouth in a dentally-sound condition. Secondly, there must be no undue delay between the discovery of caries and its treatment. This can only be compassed if the inspections can be carried out at intervals of not more than nine months, for if inspections are delayed, not only are more children found to require treatment, but the treatment required is more extensive and re-appointments have to be made, and the number of extractions is increased. This in turn extends the time required for the treatment of the children from each school, and hence a vicious circle is established. The only solution of the problem is that the dental staff should be sufficiently large to allow a nine months rotation in the schools. But the size of the staff is in turn conditioned by the number of dental chairs where the treatment may be carried out. With the increase in the number of school clinics and of dental sub-clinics, which is now under consideration, these requisite conditions will be more nearly met and the dental scheme will become more truly a conservative scheme, which should be the aim of every school dental service.

In the secondary schools 35.3 per cent. availed themselves of the opportunity of treatment at the clinics.

In my reports for 1930 and 1934 I discussed the question of orthodontic treatment other than by the extraction of appropriate but sound teeth. There are however many cases which require much prolonged and highly specialised treatment for the remedy of the deformity of the jaws and other consequent defects which result therefrom. Such treatment includes X-ray examination, plaster casts of the jaws and teeth and various mechanical devices.

Faulty occlusion of the teeth renders mastication inefficient and may produce dyspepsia and, it is thought, may even lead to ulceration of the stomach, while irregularity of the teeth increases in a marked degree the liability to dental caries. This irregularity leads in some 90 per cent. of the cases to chronic inflammation of the gums which tends to pass on to a chronic condition of pyorrhoea which ultimately causes premature loss of the teeth. But apart from these results the deformity of the face which accompanies the grosser degrees of mal-occlusion of the front teeth cannot fail to give rise to a sense of inferiority which reacts upon the child's happiness and mental attitude with dire results in the psychological reactions in later life. It often, moreover, plays an important part in their ability or inability to find employment on leaving school.

I understand that at the present time there are some 160 children under orthodontic treatment at the Dental Hospital.

At Sheep Street use has been made of radiant-heat as an adjunct to the treatment of pain and swelling following extraction of teeth. The results appear to be very satisfactory and to merit further trial.

NURSERY SCHOOLS.

Dr. V. H. King has submitted the following report on the Nursery School in Summer Lane, and the Nursery Classes held in Dartmouth Street.

	Summer Lane.	*Dartmouth Street.*
Accommodation	74	64
Number on Register	81	63
Average Attendance	68	47
CASES OF INFECTIOUS DISEASE :		
Rubella	—	3
Measles	5	4
Whooping Cough	19	4
Chicken Pox	2	12
Scarlet Fever	—	3
Diphtheria	—	3
Mumps	9	12
Number of Children failing to show satisfactory gain in weight	3	4

It will be noted that there has been quite a considerable amount of infectious disease of various forms. This is inevitable in the aggregation of a number of young children who have not acquired an immunity by a previous attack.

Dr. King continues :—

The condition of the children at these two Nursery Schools continues to improve steadily. Since the introduction of school dinners at Dartmouth Street last Easter there has been an obvious improvement in nutrition, though the incidence of catarrhal conditions in that school remains high. An attempt is being made to arrange for some of these children to be taken by a teacher, with the parents' consent, to a school clinic for U.V.R. treatment when it has been impossible for the parents to take them.

In general the parents are co-operative to a very satisfactory degree, as is clearly shewn by the advantage taken of dental treatment. About half the children at Summer Lane were found to require dental treatment, and every case was treated. At Dartmouth Street, where the children are less well nourished, nearly all were found to require treatment, but only one-third of these received it.

Nursery School, Tiverton Road. Accommodation 60.

Dr. Alexander reports :—

"Three visits were paid at which 71 children were examined and 19 re-examined. Treatment of defects found, has been very satisfactory. As formerly, sores of all kinds, minor eye and minor ear defects, are treated by the nurse at the school. In addition one case of otorrhœa received Hospital treatment. Two cases of enlarged tonsils and adenoids were operated on at Selly Oak Hospital. Eight children had U.V.R. treatment at the School Clinic or Infant Welfare Centre, while 3 others received Orthopœdic treatment at the Welfare Centre.

The Head Mistress, Miss Marriott, reports that on the whole the children's health has been good—although there were some cases of infectious illness including 9 or 10 cases of measles during the Summer term.

The parents have shown a greater readiness to follow the advice given.

All the five year old children left in good health to attend the elementary school.

The children chosen from a waiting list—there never being room for all who apply—have been carefully selected on similar lines to previous years. Appetites for dinner have been extremely good, and this, together with Cod Liver Oil has led to a satisfactory increase in weight. Dental treatment and diphtheria immunisation have been carried out for a large proportion of the children. Talks to parents were given by Dr. Fellows on "Diphtheria Prevention" and by Sister Carr (Dudley Road Hospital) on "Resistance to Disease."

REMEDIAL EXERCISE CLINICS.

With the expansion of the City the distance of the Remedial Exercise Clinics from the homes of those who would benefit by this form of treatment makes it very difficult and often impossible for them to attend. The treatment must be continuous and often prolonged and the expense and time involved for those parents who have to bring their children is a serious problem. The question therefore of adding a remedial exercise department to the new clinics in prospect merits consideration.

The type of work carried out in the three existing Remedial Exercise clinics may be gathered from the following return :—

Defect.	*Admitted.*	*Discharged.*
Spinal Curvature and Postural Deformity	246	174
General Muscular Debility	81	83
Various forms of Paralysis	30	17
Deformities of Feet	351	291
Chest Conditions, Asthma, etc.	120	68
Injuries to Limbs	50	39
Wry Neck, etc.	18	8
TOTALS	896	680

In addition 498 children attended the remedial exercise clinic for breathing exercises following the removal of tonsils and adenoids. A number of children were referred to the Royal Cripples' Hospital and the Warwickshire Orthopœdic Hospital, Coleshill, for operation at the instance of the Consulting Orthopœdic Surgeon.

The number of attendances at the Out-patient Department of the Royal Cripples' Hospital is very similar to that of previous years, as is seen in the following table.

Classification.	*Out-Patient Clinic.*		*Massage Department*	
	No. of Cases.	*Attendances.*	*No. of Cases.*	*Attendance.*
Talipes, Club Feet, etc.	108	659	26	837
Congenital Deformities	65	216	12	220
Dislocated Hips	28	86	6	193
Spastic Paralysis	53	232	6	180
Infantile Paralysis	137	970	34	955
Birth Palsy	9	29	3	206
Rickets	115	432	37	841
Flat Feet	196	739	85	1,923
Scoliosis, Kyphosis, etc.	68	275	39	1,587
Fractures	10	54	1	14
Injuries	27	79	9	173
Amputations	7	53	—	—
Osteomyelitis	7	42	—	—
Arthritis	25	111	2	113
Perthes Disease, Synovitis, Kholers Disease	30	120	4	62
Unclassified	27	71	12	157
TOTALS	912	4,168	276	7,461

Average attendance per patient :— Out-Patient Clinic ..... 4.
Massage Department ..... 27.

OPHTHALMIC CLINICS.

The number of pupils who were examined at the various clinics for defective vision was 3,711, of whom 3,392 actually obtained spectacles after prescription. In addition 551 are known to have been dealt with elsewhere and 509 obtained spectacles.

In my report for 1935 I drew attention to the importance of a yearly examination of the eyes of all children who are old enough and know their letters sufficiently well to be able to co-operate with the examiner.

It should be kept in mind that small children tend to bring the eyes very close to the work in reading or writing, preferring a large image to a distinct one. This causes a convergence of the eyes combined with a stooping position, which lays the foundation to visual defect, especially that known as myopia, with its serious results on the sight in later years. It does not appear that the importance of correcting this tendency to near work is sufficiently appreciated, especially in the infant schools. Attention was drawn to this point by Donders many years ago, and by the late Professor Priestley Smith, who in a lecture in Birmingham in 1884, subsequently printed, urged that the sight of every child should be examined every year by means of test types.

The Eye Hospital has now opened a treatment annex at Blackwell with accommodation for 20 children who require special or prolonged treatment for intractable blepharitis, conjunctivitis, keratitis and similar conditions.

Mr. Archer Hall, D.O., Surgeon to the Birmingham and Midland Eye Hospital and Ophthalmic Surgeon to the Education Committee, has made the following report:—

> The majority of children who attended the Clinic have as in other years, been usually referred by the Assistant School Medical Officers.
>
> In addition to these, suitable cases were selected both at special and ordinary sessions, for treatment at the Orthoptic Department of the Birmingham and Midland Eye Hospital, in accordance with the arrangements made with the Education Department. By this, which is one of the most recent forms of Ophthalmic treatment, parallel visual axes, together with perfect binocular vision may be obtained. A report upon the results of this scheme will be presented in due course, but it may be said that in most cases the angle of squint is decreasing, and that binocular vision with appreciation of perspective, and judgment of distances, is being obtained. With this is also secured straightness of the eyes. In some cases operative measures are necessary in the treatment of a patient, and this procedure is followed by further fusion-exercises.
>
> The vision of twenty children examined was defective from high myopia or other cause, to such a degree, that education at one of the Partially-Sighted Schools was recommended, while admission to the Blind Institution was arranged for two pupils.

An analysis of the errors of refraction found shows the following :—

	Mr. Archer-Hall.	Dr. A. W. Aldridge.
Hypermetropia	168	247
Hypermetropic astigmatism	181	179
Myopia	56	57
Myopic astigmatism	81	62
Mixed astigmatism	2	1

On consideration of the ophthalmic examination of school children, I have often been struck by the urgent need of more frequent examinations of vision, as my experience proves that cases of high myopia, which are so grave, are sometimes missed. It is generally accepted that in education, the first essential of a child is good sight, and I do feel strongly that in some degree, all types of errors of refraction are brought up for refraction somewhat late.

In the case of the long-sighted, or astigmatic pupil, a very considerable amount of eye-strain, coupled with general nerve strain, occurs, until the correct lenses are prescribed by the ophthalmic surgeon. In the case of myopia, serious progression of the defect may be taking place, the child cannot see the blackboard, or other objects in the distance, learning is very largely held up, and a prospect of education at Partially-Sighted School ensues. In the worst cases of progressive short sight, blindness from detachment of the retinae and other causes may occur in adult life, or even in adolescence.

Therefore, I urge that all children in school, should be examined at least once a year, with the Snellens Types, by a competent Nurse.

In these examinations, it is important that care should be taken to prevent the letters of the test type being memorised by the child, whereby a defect may be missed.

In 1933, at the suggestion of the Board of Education I investigated the condition of adolescent cases of high myopia in the Midlands. From my findings during this work, I saw the need of following up these patients after leaving school. In some cases, no examination of the eyes in these important defects, had been carried out for three years after leaving the Partially-Sighted or other school. In many cases an Optician was then consulted.

As these adolescents are in great need of examination by an Ophthalmic Surgeon at least every year, arrangements were made whereby the highly short-sighted pupils of our Partially-Sighted Schools, should be instructed to attend the Birmingham and Midland Eye Hospital for treatment, during the twelve months after leaving school. Having been registered under one of the Eye Hospital Surgeons, they are called up by the Hospital every nine months, or more frequently, at the discretion of the Surgeon.

It gives me pleasure to state that this excellent measure is working well, and is proving a great help in limiting the progress of myopia, which has such a deleterious effect on vision, and may indeed cause blindness.

VOCATIONAL GUIDANCE.

An investigation conducted by the Juvenile Employment and Welfare Department is in progress to ascertain the value of scientific psychological methods of approach to the problem of vocational guidance for children leaving elementary schools.

In connection with this investigation special medical examinations have been held for children leaving four of the schools coming within the scope of the experiment. A schedule was employed indicating occupations participation in which was contra-indicated by the presence of some physical defect.

The schools concerned were fairly representative of the general industrial population and the results of the examination of approximately 700 leavers are shown in the following table :

OCCUPATIONAL CONDITIONS CONTRA-INDICATED BY PHYSICAL UNFITNESS.

Occupations involving :	*Boys Unfit* %.	*Girls Unfit* %.
Standing	2.0	6.9
Sitting	0	0.4
Heat	1.0	0.6
Good Hearing	1.0	1.7
Climbing	3.0	2.3
Dry Hands	2.0	3.8
Cold	1.5	13.8
Exposure	5.0	12.7
Damp	4.0	13.2
Good Vision	7.0	7.5
Good Colour Perception	7.0	1.0
Outdoor Work	2.5	1.2
Indoor Work	0	0.4
Nervous Strain	3.0	10.2
Muscular Strain	21.0	11 9
Dusty Atmosphere	5.5	14.8
Handling of Food	—	8.1

Fit for ordinary occupation :—
Boys .... 54%. Girls .... 45.3%.

The inclusion of this, or some similar, schedule in the routine examination of school children at the "leaver" stage would seem to be desirable and really useful, but not if such examination is made at the age of 12 years. To be of practical use in the suiting of a child to his or her chosen occupation or in assisting and directing such choice, the medical examination should be made within three, or at most six, months of the school-leaving date. On the other hand, to defer the third routine examination to so late a point in the child's school life makes it impossible to deal with any defects found, so that it would seem advantageous to have the routine examination at twelve years of age and a special examination for industrial purposes at the time already indicated—three or six months before leaving school.

Dr. V. H. King, who examined the girls, suggests an additional item in the schedule for girls unfitted by reason of abnormal skin, for laundry work or for the handling of alkalis.

Dr. J. R. Mitchell found "nail-biting" in 19% of the boys. This is a contra-indication in respect of several occupations, notably those involving the handling of food or the use of lead.

PHYSICAL EDUCATION.

The accompanying report is given by Mr. MacCuaig and Miss Thorpe, Organising Inspectors of Physical Training:—

ELEMENTARY AND SPECIAL SCHOOLS.

The progress noticeable in physical training over a period of many years has been remarkably accelerated since the introduction of the Board of Education Syllabus of Physical Training (1933) for Juniors and the Committee's Gymnastic Schemes for Senior Boys and Girls. A great deal more is now expected from teacher and pupil and both have responded with admirable spirit. The standard of the work has vastly improved; a great number of teachers and pupils change into suitable costume, and the demand for teachers' classes is unabated. The second fact alone is a reliable indication of the change in the attitude of teacher and pupil. The physical training provided in the schools is acknowledged on all sides as an important and integral part of the general educational scheme, and to be a culture of the mind as well as of the body. It is encouraging to find that generally it is conducted with skill and enterprise, conviction and enjoyment.

It is now the policy of the Authority to provide, in all future Senior Departments, a fully equipped gymnasium, with changing-room and sprays. This is a step with far-reaching effects. It is hoped that it may be possible also to provide similar facilities whenever additional accommodation is being added to existing schools, as well as at large Senior Departments, where the numbers are likely to remain stable for some years.

ORGANISED GAMES.

The improvement in the methods of coaching organised games continues. The value of all-round training as opposed to specialisation is being increasingly appreciated. The method of intensive coaching by means of small groups using ample apparatus and practising the various fundamental parts of the major games, is making good headway. Interesting experiments along these lines are in progress, particularly in the Junior Schools. Promising experiments have also been in progress for some time, with the object of finding a way of organising School Sports on the "all-in" principle, which ensures participation by all medically fit pupils in several events, without any risk of over-strain. This is a direction in which experiments are very necessary and likely to yield profitable results, for school and district sports, as usually organised, ignore all, or nearly all, but the athletically endowed few, and it is clearly desirable that every effort should be made to interest the great majority of physically fit children in as wide a range of athletic events as possible.

PHYSICAL EDUCATION IN SECONDARY, JUNIOR COMMERCIAL, JUNIOR TECHNICAL, AND JUNIOR ART SCHOOLS.

During the last year a general survey was made of physical training in the above-named schools—in the light of the recommendations contained in Circular No. 1445, issued by the Board of Education. The position of physical training was discussed with the Head Master or

Mistress of each school. Taking the schools as a whole, the allocation of time for gymnastics was as follows :—

Boys—

At the beginning of the year :—
32 Forms had one period of physical training a week.
79 Forms had two periods of physical training a week.
No Form had three periods of physical training a week.

At the end of the year :—
19 Forms had one period of physical training a week.
52 Forms had two periods of physical training a week.
41 Forms had three periods of physical training a week.

Girls—

At the beginning of the year :—
44 Forms had one period of physical training a week.
52 Forms had two periods of physical training a week.
No Form had three periods of physical training a week.

At the end of the year :—
12 Forms had one period of physical training a week.
68 Forms had two periods of physical training a week.
21 Forms had three periods of physical training a week.

Four additional Physical Training teachers, two men and two women were appointed to help with the increased gymnastic training provided.

It will be seen, therefore, that there has been a considerable increase in the provision made for the gymnastic training of pupils in schools for Higher Education within the last year. It is, of course, very desirable that every pupil should have three such periods each week, but this is not possible in many schools at the present time, since it is necessary to have two suitable indoor spaces to provide this number of lessons per form in the largest schools. It is hoped that it may be possible to give consideration in the near future to the question of providing a second gymnasium where numbers justify this.

Every Secondary, Junior Commercial, Junior Technical and Junior Art School has its own playing field, and every form receives one games lesson weekly. During the year arrangments have been made for first or second year groups at each school to attend the swimming baths during school time in the summer term, at a special rate, so that all children in these schools may have the opportunity of learning to swim. In addition, many schools arrange for the older pupils also to take swimming.

PHYSICAL TRAINING IN JUNIOR EVENING INSTITUTES.

Physical Training is a compulsory part of a grouped course in the Committee's Junior Evening Institutes. The classes are all held in school halls which are fully equipped with portable gymnastic apparatus, and the scheme of training includes a wide range of activities such as physical exercises, gymnastics, games, dancing, boxing and wrestling.

Over 5,000 junior students attended these classes weekly during the year under review and about 150 teachers were engaged in conducting the classes. The teachers so engaged have all attended one or more of the Committee's Special Evening Institute Courses held from time to time for teachers desirous of qualifying for such posts. The great majority of them have also attended the local courses for teachers in charge of the gymnastic training of children in Senior Schools and are therefore experienced in handling classes in the advanced scheme of training now provided in practically all the Committee's Senior Schools.

The influence of this scheme in the day schools is now seen in the Junior Evening Institutes where the spirit and quality of the work continue to show considerable improvement. The teachers have a better understanding of the scheme and greater skill in leadership. A larger proportion of the students change into suitable gymnastic costume and are thus able to participate in the exercises with greater freedom and enjoyment.

In view of the Government Scheme, increased facilities have been provided for the physical training of adults within the framework of the Committee's Evening Institutes, and 84 classes were running during 1936.

PROVISION OF MEALS.

No changes of any importance have been made in the menu of mid-day meals supplied under the Education Act, 1921. The daily average of meals supplied was

1st January	1,589
1st July	1,652
31st December	1,729

The total number of children in receipt of tickets on 31st December was 2,603. In addition to these a further 1,645 children have received meals at some time during the year, which have been discontinued for various reasons. The request for meals comes from Head Teachers and Assistant School Medical Officers, and every child recommended for meals is provided with the necessary tickets to enable them to obtain a hot, two-course mid-day meal pending investigation of the family income. If the family income falls within the scale laid down by the Education Committee, the provision of meals is continued free of charge. On the other hand, if the income is in excess of the scale, the case is referred to the Appeals Sub-Committee for a decision as to what charge, if any, shall be made in respect of the meals supplied.

INFECTIOUS DISEASE.

Our understanding of the natural history of infectious diseases has been so greatly widened during the present century that the efficacy of measures, which formerly were thought necessary to prevent their spread, has been proved to be illusory. The time has therefore arrived when the new knowledge can be applied to the problem in relation to school attendance. Accordingly, during the past year, these questions have been the subject of numerous consultations with the Medical Officer of Health, and the rules which govern the quarantine of contacts and the return of children to school after an infectious illness have been materially modified. The new rules have been put into practice since the beginning of the present year. By these means, while giving the children in attendance the fullest protection which can be obtained under our present knowledge, there will be a very material saving of school attendance, thus conferring an advantage to all parties concerned.

The following figures for the chief forms of notified infectious disease for the past 13 years have been supplied by the Health Department:—

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Scarlet Fever	2,219	1,852	1,709	1,510	1,521	2,413	2,397	2,761	2 544	2,639	3,297	3,591	3,978
Diphtheria	1,887	1,896	1,804	1,543	1,552	1,611	1,701	1,171	620	417	1,019	1,129	1,138
Cerebro-spinal Meningitis	11	7	10	12	12	15	14	25	31	26	24	17	40
Anterior Poliomyelitis	39	11	38	15	6	6	9	3	17	10	5	9	11
Encephalitis Lethargica	282	92	89	53	41	27	10	18	23	25	12	28	23
Ophthalmia Neonatorum	413	335	395	409	530	522	596	617	319	176	558	658	812
Polio-Encephalitis	6	1	4	2	1	3	0	1	1	0	0	2	1

These figures refer to cases of all ages, but as the greatest amount of infectious disease occurs before adolescence is completed, they afford a reliable index as to the general incidence in the school population.

DEATHS IN CHILDREN OF 5-15 YEARS.

The death rate of children in the decade from 5 to 15 years is always smaller than that of any other age period. The following table which covers the whole period since the War affords evidence of the general improvement in the health of the children of the City.

DEATHS OF CHILDREN AGED 5-15.

CAUSES OF DEATH CHILDREN 5-15	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Measles	8	24	19	11	5	13	5	9	2	8	3	16	6	22	3	6	5	6	4
Scarlet Fever	7	24	40	16	11	18	7	7	4	3	1	3	9	4	4	10	3	3	4
Whooping Cough	10	3	8	5	7	0	2	4	8	2	4	7	6	4	7	2	2	2	1
Diphtheria	87	63	95	64	49	60	51	39	64	37	38	41	34	36	17	15	46	54	34
Influenza	223	42	25	2	6	6	8	10	2	9	4	14	2	2	4	6	4	5	3
Pulmonary Tuberculosis.....	52	31	26	25	22	24	17	23	16	17	10	18	13	13	16	8	6	14	3
Tuberculous Meningitis	20	19	9	15	15	13	12	20	13	18	13	7	11	15	12	14	8	15	9
,, Peritonitis & Intestines	9	16	5	6	7	6	3	5	6	9	1	6	2	3	0	1	3	0	2
Other Tuberculous Diseases	21	17	17	7	7	12	4	9	5	11	8	4	5	6	10	9	6	10	6
Rheumatic Fever	10	9	17	8	14	13	17	22	24	21	17	18	26	18	24	17	35	21	24
Cerebro-Spinal Fever.....	4	2	3	0	3	0	0	0	0	1	2	2	2	1	1	1	1	1	3
Heart Diseases.....	27	41	30	28	31	24	21	25	27	14	22	22	13	11	9	9	10	2	8
Bronchitis	10	11	5	3	4	5	0	4	3	6	1	3	0	0	1	1	1	0	0
Pneumonia	91	56	49	46	36	31	25	31	35	34	23	26	16	24	18	19	22	13	16
Appendicitis	16	25	20	20	15	13	14	13	11	10	13	10	9	9	7	12	7	11	14
Accidents	57	44	43	29	24	32	25	40	43	28	46	58	51	40	43	45	41	38	37
All Other Causes	86	99	110	89	80	99	88	79	89	96	78	104	77	66	96	92	90	73	72
TOTAL	738	526	521	374	336	369	299	340	352	324	284	359	282	274	272	267	290	268	240

CONCLUSION.

In bringing this Report to a conclusion it is a pleasure to record the unstinted help which is always forthcoming from the Teachers, School Attendance Officers, Juvenile Welfare Workers, Visitors of Boarded-out Children, Private Practitioners, Voluntary Workers and others, upon whose co-operation the smooth working of the School Medical Service depends so much.

SPECIAL SCHOOLS SUB-COMMITTEE, 1935-36.

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Mr. Alderman W. B. Kenrick (*Ex-officio*).
Alderman Dr. W. B. Featherstone, J.P.
Mr. Alderman T. Quinney, J.P.
Councillor Mrs. Clarke, J.P.
Mr. Councillor H. Johnson.
Councillor Miss Kenrick.
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CHIEF EDUCATION OFFICER:

P. D. Innes, C.B.E,, M.A., D.Sc.

CLERK TO SUB-COMMITTEE:

H. B. Newsome.

INSPECTOR OF RESIDENTIAL AND SPECIAL SCHOOLS:

Elizabeth L. S. Ross, M.A., B.Ed.

SPECIAL SCHOOLS MEDICAL OFFICER:

Charles L. C. Burns, M.R.C.S., L.R.C.P., D.P.M.

OPHTHALMIC SURGEON:

H. W. Archer Hall, D.O.

ORTHOPAEDIC SURGEON:

F. Wilson Stuart, M.D., Ch.M.

VISITING MEDICAL OFFICERS:

Cropwood and Hunter's Hill Schools : Mitchell I. Dick, M.B., Ch.B

Consultant Medical Officer, Baskerville School :
W. Carey Smallwood, M.B., Ch.B., M.R.C.P., M.R.C.S.

SPECIAL SCHOOLS.

ANNUAL REPORT OF THE SPECIAL SCHOOLS MEDICAL OFFICER, CHARLES L. C. BURNS, M.R.C.S., L.R.C.P., D.P.M., FOR THE YEAR ENDED 31st DECEMBER, 1936.

MEDICAL INSPECTION AND TREATMENT.

Routine Medical Inspections of children at the Special Schools have been held during the past year under similar conditions to those in operation during previous years.

The total number of children examined was 1,601, compared with 1,612 in the preceding year. These numbers relate to general medical examinations of the children in attendance at the Day Schools for the Partially Sighted, Deaf, Mentally Defective and Physically Defective. They do not include the children seen at the more frequent visits paid to the Baskerville Residential School, and the Day and Residential Open Air Schools.

Children who needed treatment for minor ailments, operations for the removal of tonsils and adenoids, or for defects of vision, were referred in the usual way to the School Clinics, while children calling for exceptional treatment were referred to City Hospitals.

BASKERVILLE RESIDENTIAL SCHOOL.

The routine medical work and supervision at this School is carried out by Dr. W. Carey Smallwood of the Children's Hospital. As stated in a previous report, there has been a gradual change towards admitting cases of rheumatism as early as possible after the acute attack, before the heart has suffered permanent damage. Cases are therefore taken soon after their discharge from hospital or convalescent home, so far as vacancies permit; or when their condition has been recognised by the family doctor or School Medical Officer. Where there is, or has been, some definite evidence of carditis, or undoubted rheumatic fever or chorea, there is little doubt of the diagnosis; it is otherwise, however, with those cases reported as "rheumatism" with a history of more or less continual joint or muscle pains which may or may not be rheumatic. The symptoms in such cases may be due to focal sepsis, postural strain, or neurosis, and often clear up when local conditions are treated, or on admission to open-air schools, (where cases of real rheumatism do not do well as a rule). As a result of the above policy the duration of stay has been reduced to an average of about ten months.

Cases are then followed up systematically at the Rheumatism Clinic of the Children's Hospital, where electro-cardiograms are done whenever necessary. In this way any deterioration or relapse can be quickly discovered and appropriate action taken.

At a recent follow-up examination of cases discharged between 1934-1935, the following results were obtained:

	Boys.	*Girls.*	*Total.*
Classified as very satisfactory	10	5	15
Classified as satisfactory	3	6	9
Classified as not satisfactory	3	3	6

This shows very much the same proportionate results as were included in last year's report and went back to the year 1930.

The incidence of epidemic tonsillitis has been less this winter than in previous years, and this may be put down to the various precautions taken for the prevention and early treatment of this infection. These include :—

1. The taking of all pulse and temperature readings twice daily.
2. The immediate isolation of cases and their treatment by a period of two to three weeks in bed, with the administration of aspirin in large doses.
3. The prevention of infection by such measures as the sterilization of eating utensils as far as possible, also by avoiding too close a proximity of children at table, or in bed where a "head to tail" arrangement has been adopted.

In order, however, to minimise still further the risk of such epidemics, it has been decided to build a suitable isolation block. Part of this will also be available for a girls' dormitory in order to replace a certain number of beds removed from the main block where the spacing was found to be below ideal requirements. It is hoped that this block will be available by next winter.

DAY SCHOOLS FOR THE PHYSICALLY DEFECTIVE.

One of the Schools, George Street West, is still a blot upon the school map of the City in respect of the building, and has been considered as such for years past. At last however something is to be done and a site for a new one is now being considered. The other, Little Green Lane, though not ideal, is less antiquated, and may still fulfil its purpose with some possible extension of accommodation. It has no connection with green country in spite of its name, and it is to be hoped that both Schools may some day find themselves situated in more salubrious quarters. There are of course difficulties in transport to be overcome especially with the continued growth of the town, but these must somehow be overcome, as provision for crippled children has a first claim on our educational system.

These Schools are filled half with cripples in the usual sense of the word, and half with the more severe chronic heart conditions, and the question will arise as to whether these two very distinct classes of cases should not be housed in different blocks of a P.D. School.

DAY SCHOOLS FOR THE MENTALLY DEFECTIVE.

The reduction of the price of the mid-day meal from 3d. to 2d. has now been in operation for more than a year and this, together with increased propaganda among parents, has resulted in the increase of meals taken at Schools as shown in the following table :—

Date.		*Average Attendance.*	*Average No. of Meals.*
October, 1935	(Charge of 3d.)	924	455
December, 1935	(Charge of 2d.)	904	583
June, 1936	(,, ,,)	878	541
October, 1936	(,, ,,)	868	549
December, 1936	(,, ,,)	854	547

The above figures are exclusive of "free meals."

The taking of milk in the morning still leaves much to be desired in respect of numbers. The chief reason for this comparatively poor result appears to be neglect of parents to provide the necessary half-pennies in many cases, and actual inability to do so in others, rather than dislike of milk on the part of the children. An increasing number are being recommended for free milk. There is possibly only one way to ensure a really adequate consumption however, and that is by making it free to all.

The effect of physical training, as carried out on greatly improved lines during the past few years, seems to be especially noticeable among the more senior boys, who nearly all show definite improvement in physique, posture and alertness. Among senior girls there are still many cases of bad posture.

The physical care of children in these Schools forms a very large part of a Head Teacher's task and it is a constant uphill struggle to ensure cleanliness of person and clothing, adequate rest, and also that medical treatment for eye, teeth, etc., is carried out. Everything cannot be done from the School however, or by the School Attendance Officers who often give valuable help, and it would be of great help to Head Teachers if voluntary care-committees could be formed.

It requires personal contact and detailed knowledge of the difficulties which the very poor have to contend with, to appreciate all this. Nobody who sees the kind of clothes and footwear which the children wear, hears what they have for breakfast and tea, how they sleep and live at home, and knows how much money they have to do it on, can doubt of the effects of poverty which is below the level of decent human existence.

Apart from the money difficulty which is the chief stumbling block, much can be done by advice and help, both material and moral.

OPEN-AIR SCHOOLS.

A. *Residential Schools.*

One of the most useful functions of these Schools is the treatment of chronic chest conditions, which is analogous to the Sanatorium treatment of pulmonary tuberculosis. It is only the advanced cases of fibrosis or bronchiectasis which are not discharged "cured." The cases of asthma are of special interest. It is of course a well known fact that many of these children cease to have attacks when removed from home, except in more severe cases, whatever the reason may be. The real test is therefore whether they continue to have attacks at home. It would seem that it takes at least two years to achieve this degree of improvement in moderately severe cases, and longer in the more severe. This is indicated by a consideration of 10 cases of asthma at present at Cropwood and 11 who have left, and by a similar study of 20 boys at Hunter's Hill School.

The figures are not given, as they merely give a confused impression without knowledge of the actual cases, but roughly speaking 80 per cent. practically cease to have attacks soon after admission, half of them continuing to have them at home for a considerable time after.

Boys on the whole seem to do better than girls. The final result is difficult to estimate, as so many cases become untraceable or cannot attend on account of work, but it is hoped to have an enquiry made, particularly with a view to finding out the effect of puberty in the continuance or otherwise of the attacks.

B. *Day Schools.*

One of the most useful functions of Open-Air Schools is the treatment of "*nervous*" children. While the term may be vague and unscientific it nevertheless has a fairly definite meaning to parents, teachers, and even doctors. It implies mainly timidity, anxiety, fears, lack of confidence on the one hand, and nervous symptoms such as excitability, restlessness, twitching, disturbed sleep, etc., on the other. These children are also often backward, or perhaps worried about lessons, as they have probably missed a good deal of school time through illnesses.

It is obvious that both physical and psychological factors play a part in almost every case, and interact upon each other; it is not a case of there being one particular "cause" for a complex condition.

Some of these cases are sufficiently neurotic or complicated for them to have come through the Child Guidance Clinic, or to be referred there if necessary, and there is and should be a close interchange between Open-Air Schools and Clinic. The great majority of the 70 cases considered here are however not Clinic cases, but the chief factors have been studied with the information provided by the Head Teachers and Nurses at each of the day Open-Air Schools. (A fair number of Child Guidance cases are sent to residential Open-Air Schools where a smaller number of the ordinary "nervous" type, as described here would be found).

The following then are some of the factors found in analysing these cases :—

1. The average age is about 10.

2. There are 46 boys and 24 girls, i.e., 70 cases out of a total roll in both Schools of 209 boys and 145 girls.

3. Economic conditions play a part by providing grounds for worry and anxiety which is reflected in the children, and by the bad sleeping arrangements in many cases.

   Dividing the cases into "poor" homes and "good" homes—which is of course a very rough classification—it is found that 40 cases are from poor homes and 30 from good homes. But as the percentage of poor homes in the total number at School is much greater than is the above proportion, it seems likely that neurosis is not dependent on economic conditions.

4. It is impossible to estimate the part played by different illnesses in promoting a "nervous" condition. Practically all these children have had measles, and most whooping cough as well. Those who have also had other illnesses of some severity such as pneumonia, mastoid, chronic bronchitis, etc., number 48. Rheumatism is a very infrequent factor in these cases.

5. The degree of intelligence does not seem to be an important factor, as they are divided almost equally into those of average or good intelligence, and those below the average or dull.

6. The psychological situation in the home is naturally of interest, and although not worked out in detail, it appears that there is an over-anxious or neurotic mother in 22 cases; a father with similar proclivities in 9 cases and a bullying father in 4; there are other neurotic members of the family mentioned in 7 (probably much underestimated); "broken homes" appear in only 5.

It is found that marked improvement occurs in the majority even after a short period at one of these Schools, and where this does not occur the cause is generally to be found in an over-anxious mother or a bad home.

This brief enquiry suggests that in the majority of "nervous" children the constitutional or physical aspect is the most important, since they can be dealt with so successfully by open-air school treatment; while a certain proportion depend on psychological factors as well, and may need investigation by Child Guidance methods. Treatment by bottles of medicine is obviously not the method of choice, and the initial rapid gain in weight suggests the importance of the right nutrition.

Estimation of after-results by the examination of past scholars is often vitiated by the fact that many do not come up for examination in after years, but some indication is thus gained, especially as those who have not done well are the ones most likely to attend for advice, and results are therefore probably better than is shown by these examinations.

The result of recent examinations gives an *average* result of:—

78 per cent. very good or good
22 per cent. fair or poor

In addition to this, at a recent meeting of old scholars at Uffculme, enquiries were made as to the number in work who had kept well and the results were surprisingly good. Out of 45 who attended, having left between 1933 and 1936, only two were not keeping well, all the rest stated that they were in regular work with no illnesses to complain of.

There is one conclusion of some interest which seems to emerge from various examinations of those who have been to these Schools, and this is, that provided these delicate children can be kept well up to, and during puberty, a state of good health is established, which will in most cases persist. It is generally the child round about the age of eleven who falls back on leaving the comparatively easy life, under very good conditions, of the Open-Air Schools, for the greater strain of the ordinary School.

MARSH HILL OPEN AIR SCHOOL.

Forty boys slept at School from May 1st until September 30th. Selections were made from those having the poorest home conditions, also those living at the greatest distance from school.

The boys enjoyed the life very much indeed, and made excellent progress; the average increase in weight being 4¾ lbs.

The improvement has been sustained during the winter, not one of these children having been absent because of colds or influenza.

It is hoped that during the Summer of 1937 arrangements will be made for forty girls to sleep in.

UFFCULME OPEN AIR SCHOOL.

Forty children slept at Uffculme from May 1st to September 30th, going home for weekends only. Of these 10 were girls under 10 years of age, and 30 were boys between the ages of 7 and 14 years.

The children were selected chiefly on account of poverty, overcrowding or lack of proper care in the home. Poor conditions render it impossible for these children to get sufficient rest at night in their own homes, and they gain considerable benefit from a long rest at night in the open air. The average gain in weight over a period of five months was 4½ lbs., whereas, in the four following winter months, while they were sleeping at home, the same children gained an average weight of only 1¼ lbs. per head. It is gratifying, however, to note that amongst this group of children, in spite of poor home conditions, the incidence of colds and influenza has been considerably less than amongst the rest of the School.

The children were very happy and all settled down contentedly for the full period.

THE SCHOOLS FOR PARTIALLY-SIGHTED CHILDREN.

The following report has been supplied by the Ophthalmic Surgeon (Mr. H. W. Archer Hall, D.O.) on his work during the past year in connection with the Day Schools for partially-sighted children at Edgbaston, Moseley Road and Whitehead Road:—

> "During the year, each of the three part-sighted schools has been inspected on three occasions, when pupils were examined, and certain of them selected for refraction, and other examinations, at the Great Charles Street School Clinic.
>
> At this clinic, I attended fourteen sessions, at which 113 consultations were carried out.
>
> In addition, at my Sessions for sighted children, I examined nine part-sighted children, who had been referred to the Clinic on account of their spectacles being broken, or for some other cause in which some degree of urgency was present. From the above, it will be seen that 23 half days have been devoted to the work.
>
> At my ordinary sessions, I found it necessary to advise admission to part-sighted Schools in the case of 20 children.

It is with great pleasure that I speak of the arrangements by which the highly short-sighted children who comprise the majority of our part-sighted pupils are "followed up" after leaving school. This has been accomplished by Dr. Auden in conjunction with the Birmingham and Midland Eye Hospital.

On leaving school, pupils are instructed to attend that Hospital during the 12 months after school life is finished. After this first attendance at the Hospital, they are called up for examination by the Hospital every nine months, or as deemed necessary by the Surgeon.

It will be recalled that when in 1933 I carried out an investigation into the condition of high myopes, after leaving School, I found that considerable neglect of this grave condition ensued. In many cases, no re-examination was sought until three years had elapsed, and then an optician was consulted. During this long period, considerable progression of the short-sight had taken place, to the serious disadvantage of the patient.

The arrangement of following up these patients is proving a great boon to these unfortunate people. It is limiting progression of the defect, and may be definitely regarded as a measure for the prevention of blindness.

A summary of admission and discharges to and from the Schools follows :—

	Boys.	*Girls.*
EDGBASTON DAY CLASSES.		
ADMISSIONS	1	3
LEAVERS :		
Transferred for technical training at 16 years	–	1
Left—age 16 years	–	1
Left—age 14 years	4	–
MOSELEY ROAD P.S. SCHOOL.		
ADMISSIONS	9	2
LEAVERS :		
Left—14 years	6	4
To Elementary Schools	–	1
WHITEHEAD ROAD P.S. SCHOOL.		
ADMISSIONS	4	4
LEAVERS :		
To Edgbaston Day Classes	1	1
Left—aged 14 years	7	2
To Elementary Schools	1	1
Deceased	–	1

TOWYN SUMMER SCHOOL.

The Towyn Summer School was held in 1936 for the second season at Martineau House.

There is no doubt but that these premises are being greatly appreciated by all in residence, both staff and children. In the stormy weather of the past season it was impossible to use the garage either as a schoolroom or rest-shed but the proposed new shelter will solve this problem.

Several severe storms occurred, with some thunder and lightning. No sea-bathing was possible until June 18th. Both the groups of cripple children had unfortunately a large share of wet weather.

Eight groups of 24 children were in residence, each for 13 days, the season beginning on April 29th and ending on September 22nd, with a break from July 21st to August 26th. Five groups were girls only; two (from Moseley Road Deaf School and Fashoda Road School) were mixed and one was wholly boys. No difficulties arose through sending mixed groups but experienced people were in charge and careful supervision given. In addition to the above, two parties of girls from the Shenley Fields Cottage Homes spent their summer holidays at Martineau House 47 children in all staying there for 10 days.

The groups were each accompanied by two teachers, except in the case of George Street West P.D. School, where the Assistant Nurse took the place of one teacher. For a number of teachers this year it was an entirely new but pleasant experience. The relationships between staff and children were excellent. The diaries kept by the visiting teachers show many expressions of gratitude to the House-Mother for her unremitting care and thoughtfulness, and her help in many directions outside of mere house-keeping.

The menus were attractive, well-balanced and sufficient.

Apart from one case of mumps and one of chickenpox, both of which were discovered early and isolated, the health of the children was excellent.

The weight records were quite satisfactory, though fewer children than the previous year (26 as compared with 35) gained 4 lbs., or over during the two weeks. This however might only show that the children are being better nourished during the rest of the year, perhaps as a result of the greater number taking the hot mid-day meal at the Schools.

The records indicate that excellent observational work was done, good use being made of the opportunities available. Some groups made special studies, as for example, the boys from Sherbourne Road M.D. School who, in addition to the usual nature work, investigated some of the occupations of the people. This included visits to slate-quarries, a bakery, a printing works, woollen factory, old lead mine, smithy, and a large mixed farm. Apart from the organised educational work, lasting impressions are gained by these City children in such activities as gathering primroses, violets, irises and wild roses, being taken on a boat on Tal-y-lyn, hill-climbing and a Sunday evening walk by the Dysinni.

TOWYN SUMMER SCHOOL, 1936.

Period.	*School.*	*Department*	*Sex.*	*Number of days without rain.*	*Children who gained weight.*			
					Number	*Average Gain.*		*Number who gained 4lb. or over*
						lbs.	ozs.	
April—29th—May 12th	Fashoda Road	M.D.	S. Girls J. Boys	13	24	3	2	8
May 13th—26th	Bristol Street	M.D.	Girls	8	24	2	10	3
May 27th—June 9th	Little Green Lane	P.D.	Girls	6	24	2	13	4
June 10th—23rd	George Street West	M.D.	Girls	6	24	2	12	4
June 24th—July 7th	George Street West	P.D.	Girls	5	18	1	10	Nil
July 8th—21st	Moseley Road	Deaf	Mixed	5	19	2	1	2
Aug. 26th—Sept. 8th	Whitehead Road and Moseley Road	P.S.	Girls	7	24	2	2	3
September 9th—22nd	Sherbourne Road	M.D.	Boys	7	20	2	8	2
								26

STATISTICAL INFORMATION.

The usual particulars with regard to the number of children entering or leaving the various types of Special Schools during the year in question are given below:—

DAY SCHOOLS FOR THE MENTALLY DEFECTIVE (Accommodation, 1,213—Boys and Girls).

ADMISSION EXAMINATIONS.

No. of children examined	480
No. certified as mentally defective	294*
No. to remain at Ordinary Schools	167†
No. temporarily excluded from school attendance	7
No. certified as ineducable	7
No. to stay at School for Deaf	1
No action. Over 14 years of age	4

* Includes 4 for " Ascertainment " purposes only.

† Of these, 62 were to be seen again later, 2 were referred to Hospitals and on to the Child Guidance Clinic.

PERIODICAL EXAMINATIONS.

Children allowed to leave School in order to take up employment at 14 years of age	17 (*a*)
Children allowed to leave School in order to take up employment between 14 and 15 years	27 (*b*)
Children allowed to leave School in order to take up employment between 15 and 16 years	105 (*c*)
Children leaving School at the age of 16	27 (*d*)
Children excluded from School as unable to derive further educational benefit	76
Children temporarily excluded from school attendance	2
Children certified for Monyhull Residential Special School	3

(*a*) Of these children, 10 were de-certified ; and 1 was reported to the Local Authority for Statutory Supervision.

(*b*) Of these children, 11 were de-certified, and 9 were reported to the Local Authority for Statutory supervision.

(*c*) Of these children, 70 were reported to the Local Authority for Statutory Supervision. Of these 105 children 64 left School during the term preceding their sixteenth birthday, and 4 were de-certified.

(*d*) Of these children, 26 were reported to the Local Authority for Statutory Supervision.

WAITING LIST.

The following list indicates the number of children who, at December 31st, 1936 had been reported with a view to their admission to the various M.D. Schools but who awaited examination :—

Bristol Street School	11
Burlington Street School	4
Fashoda Road School	5
Gem Street School	20
George Street West School	7
Hamilton Road School	—
Little Green Lane School	14
Ralph Road School	10
Sherbourne Road School	14
	85

DAY SCHOOLS FOR THE PHYSICALLY DEFECTIVE (Accommodation, 220—Boys and Girls).

ADMISSION EXAMINATIONS.

Number of children examined	73
Number certified for admission	57
Number unfit for school attendance	5
Number deferred for reports from Hospital	1
Number to remain at Ordinary Elementary Schools	9
No action. Over 14 years of age	1

PERIODICAL EXAMINATIONS.

Children to leave for work between 14 and 16 years of age	18
Children transferred to ordinary schools	2
Children transferred to Day (M.D.) Schools	1
Children excluded as temporarily unfit to attend school	4
Children excluded as ineducable (M.D. and P.D.)	3
Children permanently excluded	3
Children leaving at 16 years	13

BASKERVILLE RESIDENTIAL SCHOOL FOR THE PHYSICALLY-DEFECTIVE (Accommodation, 90—Boys, 42 ; Girls, 48).

ADMISSION EXAMINATIONS.

No. of children examined	151
No. certified for admission	92
No. to remain at Ordinary Elementary Schools	57
No. excluded from school attendance	2

PERIODICAL EXAMINATIONS.

Children fit to leave between the ages of 14 and 16 years	4
Children transferred to Ordinary Schools	64
Children transferred to O.A. Schools	7
Children transferred to Day (P.D.) Schools	12
Children transferred to M.D. Schools	7
Children transferred to Hospital	4
Children transferred to Convalescent Home	9
Child transferred to Blue Coat School	1
Withdrawn by parents	5

The average length of stay at the School of the children referred to above was 10½ months.

OPEN AIR SCHOOLS.

UFFCULME DAY O.A. SCHOOL (Accommodation, 120—Boys and Girls).

ADMISSION EXAMINATIONS.

No. of children examined	126
No. certified for admission	98
No. to remain at ordinary Elementary Schools	26
Consideration deferred	2

PERIODICAL EXAMINATIONS.

Children who improved sufficiently to be transferred to ordinary schools	43
Children who left at 14 years of age, whose physical condition was satisfactory	19
Children transferred to Residential Open Air Schools	7
Children transferred to Schools for the M.D.	7
Child transferred to Sanatorium	1
Children who left for miscellaneous reasons	6

The average length of stay at the School of the children referred to above was 18 months.

MARSH HILL DAY O.A. SCHOOL (Accommodation, 200—Boys and Girls).

ADMISSION EXAMINATIONS.

No. of children examined	138
No. certified for admission	108
No. to remain at ordinary Elementary Schools	30

PERIODICAL EXAMINATIONS.

Children who improved sufficiently to be transferred to ordinary Schools	44
Children who left at 14 years of age or over and whose physical condition was satisfactory	18
Children transferred to Residential O.A. Schools	18
Children transferred to Schools for the M.D.	14
Children transferred to Baskerville School	3
Child transferred to School for Deaf	1
Child transferred to Day P.D. School	1
Children who left District	5
Child who died	1

The average length of stay at the School of the above-mentioned children was 19 months.

CROPWOOD RESIDENTIAL O.A. SCHOOL (Accommodation, 80 Girls).

ADMISSION EXAMINATIONS.

No. of children examined	71
No. certified for admission	59
No. to remain at Ordinary Elementary Schools	12

PERIODICAL EXAMINATIONS.

Children who improved sufficiently to be transferred to Ordinary Schools	32
Children who left at 14 years of age, or over, whose physical condition was satisfactory	8
Child transferred to M.D. School	1
Children transferred to Day O.A. Schools	6
Children who left for miscellaneous reasons	18

The average time spent by children at the Cropwood School was 16 months.

HUNTERS HILL RESIDENTIAL O.A. SCHOOL (Accommodation, 120—Boys).

ADMISSION EXAMINATIONS.

No. of children examined	67
No. certified for admission	59
No. to remain at Ordinary Elementary Schools	7
No. to be seen later	1

PERIODICAL EXAMINATIONS.

Children who improved sufficiently to be transferred to ordinary schools	55
Children who left at 14 years of age, whose physical condition was satisfactory	14
Children transferred to Day (O.A.) Schools	2
Children transferred to M.D. Schools	3
Children who left for miscellaneous reasons	8

The average length of stay at the School of the children referred to above was 16 months.

CITY OF BIRMINGHAM

Education Committee

Appendix to Annual Report
of
School Medical Officer

for the year ended 31st December, 1936

OFFICIAL TABLES

Elementary Schools.

Table I.—Return of Medical Inspections.

A. ROUTINE MEDICAL INSPECTIONS.

Number of Inspections in the prescribed Groups :	
Entrants	13,968
Second Age Group	12,675
Third Age Group	12,466
Total	39,109
Number of other Routine Inspections	—
Grand Total	39,109

B. OTHER INSPECTIONS.

Number of Special Inspections	40,480
Number of Re-Inspections	62,347
Total	102,827

C. CHILDREN FOUND TO REQUIRE TREATMENT.

Number of individual children found at Routine Medical Inspection to require treatment (excluding Uncleanliness and Dental Diseases).

Prescribed Groups :	
Entrants	2,785
Second Age Group	2,499
Third Age Group	2,121
Total (Prescribed Groups)	7,405
Other Routine Inspections	—
Grand Total	7,405

TABLE II.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31ST DECEMBER, 1936.

	Defect or Disease.	Routine Inspections.		Special Inspections.	
		No. of Defects.		No. of Defects.	
		Requiring treatment.	Requiring to be kept under observation, but *not* requiring treatment.	Requiring treatment.	Requiring to be kept under observation, but *not* requiring treatment.
	(1)	(2)	(3)	(4)	(5)
Skin	Ringworm :				
	(1) Scalp	5	—	55	—
	(2) Body	4	—	184	1
	(3) Scabies	28	—	691	2
	(4) Impetigo	68	2	2,774	—
	(5) Other Diseases (non-Tuberculous)	146	9	4,615	2
	Total (Heads 1 to 5)	251	11	8,319	5
Eye	(6) Blepharitis	57	2	494	—
	(7) Conjunctivitis	23	—	618	—
	(8) Keratitis	—	—	11	—
	(9) Corneal Opacities	6	3	56	1
	(10) Other Conditions (excluding Defective Vision and Squint	11	6	560	1
	Total (Heads 6 to 10)	97	11	1,739	2
	(11) Defective Vision (excluding Squint)	1,799	381	2,243	45
	(12) Squint	312	103	448	14
Ear	(13) Defective Hearing	109	13	278	1
	(14) Otitis Media	162	10	858	3
	(15) Other Ear Diseases	86	18	644	6
Nose and Throat	(16) Chronic Tonsillitis only	145	266	205	26
	(17) Adenoids only	40	20	60	—
	(18) Chronic Tonsillitis and Adenoids	1,496	237	1,180	33
	(19) Other Conditions	156	6	2,334	1
(20) Enlarged Cervical Glands (non-Tuberculous)		8	139	520	21
(21) Defective Speech		61	24	76	4
Heart and Circulation	Heart Disease :				
	(22) Organic	62	44	147	47
	(23) Functional	13	21	63	9
	(24) Anaemia	409	17	762	6
Lungs	(25) Bronchitis	437	31	1,324	10
	(26) Other non-Tuberculous Diseases	52	14	210	5
Tuberculosis	Pulmonary :				
	(27) Definite	3	1	11	3
	(28) Suspected	27	5	58	8
	Non-Pulmonary :				
	(29) Glands	4	1	6	1
	(30) Bones and Joints	2	4	12	
	(31) Skin	2	1	—	—
	(32) Other Forms	—	1	5	—
	Total (Heads 29 to 32)	8	7	23	1
Nervous System	(33) Epilepsy	13	4	62	7
	(34) Chorea	17	4	190	10
	(35) Other Conditions	17	8	53	7
Deformities	(36) Rickets	18	14	7	4
	(37) Spinal Curvature	108	8	54	4
	(38) Other Forms	238	32	351	28
(39) Other Defects and Diseases (excluding Uncleanliness and Dental Diseases)		965	65	15,922	197
	Total	7,109	1,514	38,141	507

B CLASSIFICATION OF THE NUTRITION OF CHILDREN INSPECTED DURING THE YEAR IN THE ROUTINE AGE GROUPS.

Age-Groups	In-spected	Number of Children.							
		A (Excellent)		B (Normal)		C (Slightly subnormal)		D (Bad)	
		No.	%	No.	%	No.	%	No.	%
Entrants	13,968	366	2.6	11,125	79.7	1,859	13.3	618	4.4
Second Age-group	12,675	492	3.9	9,980	78.7	1,799	14.2	404	3.2
Third Age-group	12,466	411	3.3	10,543	84.7	1,277	10.2	235	1.8
Other Routine Inspections	—	—	—	—	—	—	—	—	—
Total	39,109	1,269	3.2	31,648	81.0	4,935	12.6	*1,257	3.2

*Of these, 627 were reported by one Assistant School Medical Officer. But for this, the figure is comparable with the year 1935.

TABLE III.—RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

			Total.
Blind.		At Certified Schools for the Blind	30
		At no School or Institution	—
Partially Sighted.		At Certified Schools for the Blind	25
		At Certified Schools for the Partially Sighted.....	102
		At Public Elementary Schools	4
		At other Institutions	1
		At no School or Institution	—
Deaf		At Certified Schools for the Deaf	101
		At no School or Institution	—
Partially-Deaf.		At Certified Schools for the Deaf	33
		At Public Elementary Schools	2
		At no School or Institution	—
Mentally Defective		At Certified Schools for Mentally Defective Children	1298
		At Public Elementary Schools	39*
		At other Institutions	38
		At no School or Institution	1
Epileptics	Suffering from severe epilepsy.	At Certified Special Schools	8
		At Public Elementary Schools	—
		At no School or Institution	2
Physically Defective	Suffering from pulmonary tuberculosis.	At Certified Special Schools	2
		At Public Elementary Schools	5
		At Sanatoria approved by the Ministry of Health	69
		At no School or Institution	—

* Certified as mentally-defective and awaiting admission to Special Schools. There are in addition 85 children in attendance at Public Elementary Schools who have been reported as probably mentally-defective and who await examination.

TABLE III. *Contd.*—RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

			Total.
Physically Defective.	Suffering from non-pulmonary tuberculosis	At Certified Special Schools	47
		At Public Elementary Schools	7
		At other Institutions	25
		At no School or Institution	2
	Delicate Children, *i.e.*, all children (except those included in other groups) whose general health renders it desirable that they should be specially selected for admission to an Open Air School.	At Certified Special Schools	602
		At Public Elementary Schools	99*
		At other Institutions	—
		At no School or Institution	9
	Crippled Children (other than those diagnosed as tuberculous and in need of treatment for that disease).	At Certified Special Schools	195
		At Public Elementary Schools	6
		At other Institutions	2
		At no School or Institution	2
	Children with heart disease, *i.e.*, children whose defect is so severe as to necessitate the provision of educational facilities other than those of the public elementary school.	At Certified Special Schools	127
		At Public Elementary Schools	7
		At other Institutions	2
		At no School or Institution	6

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* Awaiting admission to Open Air Schools. In addition there are 107 children attending Public Elementary Schools who have been reported for examination with a view to admission to Open Air Schools.

TABLE IV.—RETURN OF DEFECTS TREATED DURING THE YEAR ENDED 31ST DECEMBER, 1936.

TREATMENT TABLES.

Group I.—Minor Ailments (excluding Uncleanliness, for which see Table VI.

Disease or Defect.	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme.	Otherwise.	Total.
(1)	(2)	(3)	(4)
Skin—			
Ringworm-Scalp :			
(i). X-Ray Treatment	29	1	30
(ii). Other treatment	40	2	42
Ringworm-Body	172	11	183
Scabies	554	13	567
Impetigo	3,071	47	3,118
Other Skin Disease	4,420	68	4,488
Minor Eye Defects .... (External and other, but excluding cases falling in Group II.)	1,540	57	1,597
Minor Ear Defects	1,832	137	1,969
Miscellaneous .... (*e.g.*, minor injuries, bruises, sores, chilblains, etc.)	10,331	305	10,636
Total	21,989	641	22,630

TABLE IV. (*Contd.*)

Group II. Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I.).

	No. of Defects dealt with.		
	Under the Authority's Scheme.	Otherwise.	Total.
ERRORS OF REFRACTION (including squint). (Operations for squint should be recorded separately in the body of the School Medical Officer's Report).	3,531	356	3,887
Other defect or disease of the eyes (excluding those recorded in Group I)	10	23	33
Total	3,541	379	3,920
	Under the Authority's Scheme.	Otherwise.	Total.
No. of Children for whom Spectacles were (*a*) Prescribed	3,208	352	3,560
(*b*) Obtained	3,212	345	3,557

Group III. Treatment of Defects of Nose and Throat.

Number of Defects.

Received Operative Treatment.												Received other forms of Treatment.	Total number treated.
Under the Authority's Scheme, in Clinic or Hospital. (1)				By Private Practitioner or Hospital, apart from the Authority's Scheme. (2)				Total. (3)				(4)	(5)
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)		
1	3	1,175	19	29	8	308	17	30	11	1,483	36	1,965	3,525

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils & Adenoids. (iv) Other defects of the nose and throat.

TABLE IV. (*Contd.*)

Group IV. Orthopaedic and Postural Defects.

	Under the Authority's Scheme (1)			Otherwise. (2)			Total number treated.
	Residential treatment with education. (i)	Residential treatment without education. (ii)	Non-residential treatment at an orthopaedic clinic. (iii)	Residential treatment with education. (i)	Residential treatment without education. (ii)	Non-residential treatment at an orthopaedic clinic. (iii)	
Number of children treated.	197	7	2575	3	7	78	2867

TABLE V. DENTAL INSPECTION AND TREATMENT.

(1) Number of children inspected by the Dentist :

(*a*) Routine age-groups.

Age :	
5	12,212
6	11,112
7	11,808
8	11,917
9	12,204
10	12,144
11	11,014
12	10,260
13	10,417
14	1,031

Total 104,119

(*b*) Specials 253

(*c*) Total (Routine and Specials) 104,372

(2) Number found to require treatment 69,101

(3) Number actually treated 35,700

(4) Attendances made by children for treatment 43,009

(5) Half-days devoted to { Inspection 516, Treatment 3,177 } Total 3,693.

(6) Fillings { Permanent Teeth 14,984, Temporary Teeth 397 } Total 15,381.

(7) Extractions { Permanent Teeth 21,246, Temporary Teeth 73,656 } Total 94,902.

(8) Administrations of general anaesthetics for extractions 21,964.

(9) Other Operations { Permanent Teeth 2,486, Temporary Teeth 3,078 } Total 5,564.

TABLE VI. UNCLEANLINESS AND VERMINOUS CONDITIONS.

(i.) Average number of visits per school made during the year by the School Nurses....................10·31

(ii.) Total number of examinations of children in the Schools by School Nurses....................358,130.

(iii.) Number of *individual* children found unclean....................11,853.

(iv.) Number of individual children cleansed under Section 87 (2) and (3) of the Education Act 1921.........................nil.

(v.) Number of cases in which legal proceedings were taken :—

(*a*) Under the Education Act, 1921....................Nil.

(*b*) Under School Attendance Byelaws....................85

SECONDARY SCHOOLS

AND

OTHER INSTITUTIONS FOR HIGHER EDUCATION

TABLE I.—RETURN OF MEDICAL INSPECTIONS.

NUMBER OF CHILDREN INSPECTED 1ST JANUARY, 1936, TO 31ST DECEMBER, 1936	
Number of Routine Medical Inspections	6,985
Number of Special Medical Inspections	131
Number of Re-inspections	800
Total	7,916
Number of Individual Children found to require Treatment.....	1,112

Table II. (Secondary Schools).

A. Return of Defects found by Medical Inspection in the Year ended 31st December, 1936.

Defect or Disease. (1)		Routine Inspections. No. of Defects. Requiring treatment. (2)	Routine Inspections. No. of Defects. Requiring to be kept under observation, but *not* requiring treatment. (3)	Special Inspections. No. of Defects. Requiring treatment. (4)	Special Inspections. No. of Defects. Requiring to be kept under observation, but *not* requiring treatment. (5)
Skin	Ringworm :				
	(1) Scalp	—	—	—	—
	(2) Body	—	—	—	—
	(3) Scabies	—	—	1	—
	(4) Impetigo	1	1	—	—
	(5) Other Diseases (non-Tuberculous)	48	7	1	—
	Total (Heads 1 to 5)	49	8	2	—
Eye	(6) Blepharitis	6	—	—	—
	(7) Conjunctivitis	2	—	—	—
	(8) Keratitis	—	—	—	—
	(9) Corneal Opacities	—	—	—	—
	(10) Other Conditions (excluding Defective Vision and Squint	1	—	1	—
	Total (Heads 6 to 10)	9	—	1	—
	(11) Defective Vision (excluding Squint)	528	138	34	4
	(12) Squint	8	5	—	—
Ear	(13) Defective Hearing	9	2	—	—
	(14) Otitis Media	13	—	—	—
	(15) Other Ear Diseases	10	—	—	—
Nose and Throat	(16) Chronic Tonsillitis only	16	30	—	—
	(17) Adenoids only	—	—	—	—
	(18) Chronic Tonsillitis and Adenoids	31	8	3	—
	(19) Other Conditions	32	1	2	2
(20) Enlarged Cervical Glands (non-Tuberculous)		3	1	—	—
(21) Defective Speech		10	—	2	2
Heart and Circulation	Heart Disease :				
	(22) Organic	11	14	3	1
	(23) Functional	3	8	—	1
	(24) Anaemia	86	1	2	—
Lungs	(25) Bronchitis	8	1	—	—
	(26) Other non-Tuberculous Diseases	26	3	—	—
Tuberculosis	Pulmonary :				
	(27) Definite	—	—	—	—
	(28) Suspected	4	3	—	—
	Non-Pulmonary :				
	(29) Glands	—	—	—	—
	(30) Bones and Joints	3	—	—	—
	(31) Skin	—	—	—	—
	(32) Other Forms	1	—	—	—
	Totals (Heads 29 to 32)	4	—	—	—
Nervous System	(33) Epilepsy	1	—	—	—
	(34) Chorea	1	1	—	—
	(35) Other Conditions	4	—	—	—
Deformities	(36) Rickets	1	1	—	—
	(37) Spinal Curvature	42	3	—	—
	(38) Other Forms	132	17	3	2
(39) Other Defects and Diseases (excluding Uncleanliness and Dental Diseases)		128	8	8	8
Total		1169	253	60	20

TABLE IV. (SECONDARY SCHOOLS)—RETURN OF DEFECTS TREATED DURING THE YEAR ENDED 31ST DECEMBER, 1936.

TREATMENT TABLE.

Group I. Minor Ailments (excluding Uncleanliness).

Disease or Defect.	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme.	Otherwise.	Total.
(1)	(2)	(3)	(4)
Skin —			
Ringworm-Scalp :			
(i) X-ray Treatment	—	—	—
(ii) Other	—	—	—
Ringworm-Body	—	—	—
Scabies	—	—	—
Impetigo	13	4	17
Other skin disease	16	11	27
Minor Eye Defects .... (External and other, but excluding cases falling in Group II.)	20	3	23
Minor Ear Defects	14	9	23
Miscellaneous .... (*e.g.*, minor injuries, bruises, sores, chilblains, etc.).	25	9	34
Total	88	36	124

TABLE IV. (SECONDARY SCHOOLS) (*Contd.*)

Group II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I.).

	No. of Defects dealt with.		
	Under the Authority's Scheme.	Otherwise.	Total.
ERRORS OF REFRACTION (including squint). (Operations for squint should be recorded separately in the body of the School Medical Officer's Report).	180	171	351
Other defect or disease of the eyes (excluding those recorded in Group I)	—	1	1
Total	180	172	352
	Under the Authority's Scheme.	Otherwise.	Total
No. of Children for whom Spectacles were (*a*) Prescribed	180	164	344
(*b*) Obtained	180	164	344

Group III.—Treatment of Defects of Nose and Throat.

Number of Defects.

Received Operative Treatment.												Received other forms of Treatment. (4)	Total number treated. (5)
Under the Authority's Scheme, in Clinic or Hospital. (1)				By Private Practitioner or Hospital, apart from the Authority's Scheme. (2)				Total. (3)					
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)		
–	–	–	–	–	–	—	–	–	–	—	–	35	67
–	–	3	–	1	–	23	5	1	–	26	5		

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils & Adenoids. (iv) Other defects of the nose and throat.

TABLE IV. (SECONDARY SCHOOLS) (*Contd.*)

Group IV.—Orthopaedic and Postural Defects.

	Under the Authority's Scheme (1)			Otherwise. (2)			Total number treated.
	Residential treatment with education. (i)	Residential treatment without education. (ii)	Non-residential treatment at an orthopaedic clinic. (iii)	Residential treatment with education. (i)	Residential treatment without education. (ii)	Non-residential treatment at an orthopaedic clinic. (iii)	
Number of children treated.	—	—	90	—	—	—	90

Group V.—Dental Defects.

(1) Number of Children who were :—

(i) Inspected by the Dentist :
Aged :

10	71
11	1,024
12	1,553
13	1,606
14	1,671
15	1,259
16	433
17	70
18	12

Total 7,699

(ii) Found to require treatment 4,921

(iii) Actually treated 1,744

(2) Half-days devoted to
Inspection 32
Treatment (Carried out in conjunction with work for Elementary Schools).

(3) Attendances made by children for treatment 2,675.

(4) Fillings
Permanent teeth 2,443
Temporary teeth 9
Total 2,452.

(5) Extractions
Permanent teeth 1,718
Temporary teeth 418
Total 2,136.

(6) Administrations of general anaesthetics for extractions 771.

(7) Other operations
Permanent teeth 219
Temporary teeth 39
Total 258.

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